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Advances in Psychiatry
Second Volume

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Editor: *G. N. Christodoulou*

Cover page: Electra Christodoulou

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PREFACE

The Sections of the World Psychiatric Association (currently 64) are the "scientific backbone" of our Association. That this is so is documented by the richness, quality and diversity of activities of the Sections, from research, scientific meetings and congresses to educational programs, consensus statements and publications. It is further documented by the production of this volume of state-of-the-art papers by Section Leaders which follows the first volume produced in 2002.

Each of the papers comprising this volume is an update on the progress achieved in the area covered by each participating section during the last triennium. It is difficult to find such condensed information elsewhere, especially if one considers that these articles have been prepared by worldwide authorities in their field.

It is my conviction that the volume will be invaluable as a reference book not only to the Sections and the WPA components but also to the psychiatric community at large.

I want to congratulate the Editor of this volume Professor George Christodoulou who has succeeded me in the leadership of the Sections for his initiative to create this important series of state-of-the-art volumes. As predicted by Juan Lopez-Ibor in his Introduction to the first volume, owing to Professor George Christodoulou's drive, "*Advances*" have developed into a tradition in the WPA. I would also like to thank our Sections for their contributions which represent the state of the art of psychiatric development.

I am confident that the volume will contribute immensely to much needed dissemination of scientific information in our field and that it will be received enthusiastically.

Professor Ahmed Okasha
President of the World Psychiatric Association



PREFACE

In the history of the World Psychiatric Association, the development of the Scientific Sections has played a crucial role. Since 1961, they have afforded continuity and depth to the life of the Association. Over the past 6 years, under the leadership of Professor George Christodoulou, WPA Scientific Sections have remarkably leaped forward. According to the WPA General Triennial Survey, they have achieved the feat of doubling their earlier level of productivity and excellence.

We are witnessing with admiration the success of intersectional collaboration, the growing cooperation between WPA Sections and national societies' sections, the emergence of *Science and Care* and the enormous number of books and journals published by WPA Sections, their productivity in consensus statements, educational programs and scientific meetings, as well as the first edition of the *Sections' Directory*, a decisive development as a lifeline for the institutional strength and scientific capacity of WPA.

These impressive gains serve as backdrop for the publication of the second edition of *Advances in Psychiatry*. Under the skillful hand of Professor Christodoulou, 32 of our Scientific Sections are offering here a state-of-the-art presentation of their respective domains. They undoubtedly will serve as valuable reference for the improved practice of psychiatry, effective training of health professionals, and enrichment of our knowledge base.

Let's enjoy and celebrate together this achievement.

Professor Juan Enrique Mezzich
President Elect of the World Psychiatric Association

CONTRIBUTORS

M. T. Abou-Saleh
Section on Biological Psychiatry

J. Arboleda-Florez
Section of Forensic Psychiatry

F. Baingana
Section on Conflict Management and Resolution

C. Banzato
Section on Classification, Diagnostic Assessment and Nomenclature

D. Baron
Section on Education in Psychiatry

G. Bartocci
Section on Transcultural Psychiatry

C. E. Berganza
Section on Classification, Diagnostic Assessment and Nomenclature

N. Bouras
Section on Psychiatry of Mental Retardation

M. Broom
Section on Philosophy and Humanities in Psychiatry

E. Chiu
Section of Old Age Psychiatry

G. N. Christodoulou
Section on Preventive Psychiatry

H. Costello
Section on Psychiatry of Mental Retardation

M-A. Crocq
Section on Research Methods in Psychiatry

T. Dario
Section on Ecology, Psychiatry and Mental Health

S. Draganic-Gajic
Section on Preventive Psychiatry

R. Fahrer
Section on Psychiatry, Medicine and Primary Care

F. Fawzy
Section on Psycho-oncology

K. W. M. Fulford
Section on Philosophy and Humanities in Psychiatry

W. Gaebel
Section on Schizophrenia

L. Gask
Section on Education in Psychiatry

N. Graham
Section of Old Age Psychiatry

L. Grassi
Section on Psycho-oncology

U. Halbreich
Section of Interdisciplinary Collaboration

K. Halmi
Section of Eating Disorders

H. Herrman
Section on Public Policy and Psychiatry

P. Hoff
Section on History of Psychiatry

J. C. Holland
Section on Psycho-oncology

A. Janca
Section on Measurement Instruments in Psychiatric Care

L. Janiri
Section on Ecology, Psychiatry and Mental Health

J. M. Jaranson
Section on Psychological Consequences of Torture and Persecution

C. Johansen
Section on Psycho-oncology

M. Kastrup
Section on Psychological Consequences of Torture and Persecution

C. Katona
Section of Old Age Psychiatry

G. I. Keitner
Section on Family Research and Intervention

M. J. Khalid
Section on Women's Mental Health

U. Koch
Section on Psycho-oncology

T. Kurimay
Section on Family Research and Intervention

D. Lecic-Tosevski
Section on Preventive Psychiatry

L. Levi
Section of Occupational Psychiatry

R. Luthringer
Section on Research Methods in Psychiatry

J-P. Macher
Section on Research Methods in Psychiatry

M. Maldonado
Section on Transcultural Psychiatry

G. Martinotti
Section on Ecology, Psychiatry and Mental Health

M-A. Materazzi
Section on Mass Media and Mental Health

J. E. Mezzich
Section on Classification, Diagnostic Assessment and Nomenclature

A. Mohit
Section on Conflict Management and Resolution

R. S. Murthy
Section on Conflict Management and Resolution

B. Nurcombe
Section on Child and Adolescent Psychiatry

S. Opjordsmoen
Section of Clinical Psychopathology

M. Pejovic-Milovancevic
Section on Preventive Psychiatry

K. Prot-Klinger
Section on Mental Health Economics

L. Salvador-Carulla
Section on Psychiatry of Mental Retardation

N. Sartorius
Section on Stigma and Mental Disorders

E. Simonsen
Section on Personality Disorders

E. Sorel
Section on Conflict Management and Resolution

G. Spinetti
Section on Ecology, Psychiatry and Mental Health

G. Stanghellini
Section on Philosophy and Humanities in Psychiatry

J. Stepanovic
Section on Preventive Psychiatry

D. E. Stewart
Section on Women's Mental Health

H. Stuart
Section on Stigma and Mental Disorders

N. Tataru
Section of Old Age Psychiatry

L. Tenjovic
Section on Preventive Psychiatry

R. Thomas
Section on Conflict Management and Resolution

H-O. Thomashoff
Section on Art and Psychiatry

T. Thornton
Section on Philosophy and Humanities in Psychiatry

P. Tyrer
Section on Personality Disorders

H. M. van Praag
Section on Religion, Spiritualiy and Psychiatry

J. Ventouras
Section on Measurement Instruments in Psychiatric Care

P. J. Verhagen
Section on Religion, Spiritualiy and Psychiatry

A. K. Wilson
Section on Family Research and Intervention

S. H. Zuvekas
Section on Mental Health Economics



INTRODUCTION

This second volume of "*Advances in Psychiatry*" is composed of update papers by the chairs or the representatives of 32 scientific sections of the World Psychiatric Association.

As Secretary for Sections I am proud of the accomplishments of our Sections, their productivity, their spirit of collaboration and their achievements. Among these achievements, I believe that the two volumes on "*Advances in Psychiatry*" occupy a special position. The update papers that comprise these volumes offer a real service to psychiatrists and especially to younger colleagues and have met with the appreciation of the WPA components, as shown in the results of the WPA General Survey.

I wish to thank the 32 contributors to this volume, the Administrative Officer of the Hellenic Psychiatric Association Ms Helen Gretsa, the Secretary of the Association Ms Anna Moschonidou for their great help, my daughter Electra Christodoulou for the beautiful cover of this Volume and Servier for an unrestricted research grant that made the publication of this book possible.

I would also like to express the hope that "*Advances*" will continue being published every three years as a contribution to the advancement of psychiatric knowledge and as an offer to the international psychiatric community.

Professor George N. Christodoulou
WPA Secretary for Sections

Introductory article

Advances in Psychiatry (Editor: G. N. Christodoulou)
Vol II, 2005, pp 5-10

The Scientific Sections of the World Psychiatric Association and their contribution to Psychiatry

George N. Christodoulou
Secretary for Sections, World Psychiatric Association

Introduction

The network of Sections of the World Psychiatric Association is perhaps the most extensive network not only in Psychiatry but also in Medicine as a whole. It covers practically all aspects of Psychiatry, from Biological Psychiatry, Genetics, Neuroimaging, Research Methodology, and Measurement Instruments to Psychotherapy, Psychoanalysis in Psychiatry, Philosophy and Humanities, Literature and Psychiatry, Art and Psychiatry, and Religion and Psychiatry.

The richness, diversity, and independent function of the Sections have promoted the evolution of many of them into centers of scientific information and research and have rendered them motivational forces for the enrichment and expansion of the scientific field covered by them. Many of them have become driving forces for the creation of scientific societies (which have retained their strong links with the section) and some of the section leaders are serving as consultants to scientific and research organizations.

The expansion of the Sections, that has become more extensive in the last triennium, has underlined the need for their better coordination, including their clustering in groups. Additionally, the benefits of collaboration between them have become more evident. Intersectional collaboration is the key word that expresses this tendency which has proved very productive from the educational and research perspectives. This collaboration reached its peak in a congress specifically dedicated to intersectional collaboration, the first Intersec-tional Congress of the World Psychiatric Association, held in Athens in March 2005.

During the last triennium the WPA Scientific Sections have carried out their mission as the "scientific backbone" of the Association in a way that has met with the appreciation of the WPA components.

The 2001 General Survey has shown that the Sections' perceived overall-performance has improved by 8% since the previous 1996-1999 General Survey, and the 2004 survey has shown a further increase by 15%. Now almost 60% of the WPA components rate the Sections' performance as excellent or good.

The Sections' work is not usually manifest because they contribute to the work of other components (eg, education, publications, meetings, World Congresses) without being particularly visible. Visibility is not so important as long as the work of the WPA as a whole is carried out. Everybody, however, should be aware of the fact that the sections invariably provide the backing for most WPA activities and should receive credit for this.

During period 2002-2005 the following actions have been carried out:

Organization of the Sections

- *Regular communication* between the Secretary for Sections and the leadership of each section has been established. This communication has been materialized through
  - regular correspondence and evaluation of the work of the sections.
  - written reports annually.
  - an overall written report about each section's activities over the last triennium, submitted prior to the XIII World Congress of Psychiatry. A special evaluation form has been devised for this purpose.
  - regular meetings of chairs of Sections with the Secretary for Sections and the Operational Committee for Sections have been implemented. The last one, in Athens in March 2005 was perhaps the best attended leadership meeting.
- *Utilization of the Operational Committee on Sections*. The Operational Committee on Sections played a substantial role as an advisory body but also contributed to the organizing and functioning of the Sections.
- *The Scientific Sections' membership Directory*. The Directory constitutes a major tool of communication (to be discussed further).

Admission of new Sections

The number of Sections has now reached 64. Eight new Sections have been admitted on an ad hoc basis:

- *Section on Stigma and Mental Health*
- *Section on Exercise and Sports Psychiatry*
- *Section on Literature and Psychiatry*
- *Section on Impulsivity and Impulse Control Disorders*
- *Section on Brain and Pain*
- *Section on Psychiatry in Developing Countries*
- *Section on Rural Mental Health*
- *Section on ADHD*

Creation of two separate Sections

The Section on Military and Disaster Psychiatry has been divided into two sep-

arate Sections ie, the Section on Military Psychiatry and the Section on Disaster Psychiatry in order to better fulfill their purpose.

Change of name of Section

The Section on Humanities in Psychiatry has been renamed Section on Philosophy and Humanities in Psychiatry.

Intersectional collaboration

This is an important issue that has been highlighted by Ahmed Okasha, my predecessor. The scope is to encourage the sections to form clusters on the basis of common interests and to work together.

In the Regional Congress of the WPA held in Athens in February 1999, a panel discussion involving 10 sections was organized. This has been repeated in Yokohama in 2002 (collaboration of Sections on Disaster Psychiatry and Anxiety Disorders and OCD) and since then it has been implemented in a systematic basis in educational initiatives, research, and meetings. A Forum on Prevention involving 14 sections and a similar Forum on Disasters involving 12 sections organized in the framework of the Intersectional Congress (Athens, March 2005) proved very successful.

Intersectional communication

The sections have been encouraged to provide information about their activities to the Secretary for Education Professor Roger Montenegro who is in charge of the WPA website. The triennial volume on "*Advances in Psychiatry*" consisting of 32 papers helps communication as well as the Directory of Members of each section that provides members the opportunity to communicate between them individually. The WPA Journal, The Sections' Bulletin "*Science and Care*" and the 23 Sections' Journals, Bulletins, or Newsletters provide information about the Sections' activities.

"Advances in Psychiatry": the triennial state-of-the-art publication

Every three years a volume containing state-of-the-art papers by each of the sections, reflecting the progress achieved in the scientific area covered by each section (with special emphasis on the contribution of the section to this progress) is being published. The first of these volumes, entitled "*Advances in Psychiatry*", has already been distributed to Sections' chairs and other WPA components. The response has been very positive as shown in the results of the General Survey.

The second volume consists of 33 papers by international authorities in their field. It will be distributed to all WPA components and will be available in the WPA website. The purpose of these volumes is to encourage the Sections to be productive and increase their visibility. Each Section should be in a position to single out and highlight the most important triennial developments in its sphere of expertise. These volumes are useful to all WPA components, contribute to intersectional com-

munication, provide means for evaluation of the Sections' work and have developed into a tradition within the WPA.

Periodic publications by the Sections

Twenty three (23) Sections produce Journals (some indexed), Bulletins, or Newsletters (eg, *Journal of Affective Disorders, Journal of Mental Health Policy and Economics, Psychopathology, Archives of Women's Mental Health, International Journal of Psychiatry in Clinical Practice, International Practices in Addiction Medicine, Dialogues in Clinical Neuroscience, Neurosciencias y Humanidades, Acta Neuropsychiatrica, Ecology, Psychiatry and Mental Health, Transcultural Psychiatry Bulletin, ASCAP Bulletin, History of Psychiatry Bulletin, Addiction Psychiatry Newsletter, Classification Section Newsletter, Measurement Instruments Newsletter, Sleep Psychiatry Newsletter, Suicidology Newsletter, Psychotherapy Newsletter, Psychophysiology Bulletin, Schizophrenia Newsletter, Emergency Psychiatry Journal*). Six of these publications have started in the last triennium.

Books, chapters in books edited by the WPA, and educational programs by the Sections

Fifteen (15) Sections have produced books (eg, *"Issues in Preventive Psychia-try", "Peoples' Dignity through the Cultures", "International Practices in Addiction Medicine", "Guidance on work-related stress", "Forensic Psychia-tric Evidence", "Somatoform disorders: a worldwide perspective", "Update on Clinical Practice guidelines", "A basic Handbook for Autistic Spectrum Disorders", "Dynamische Psychiatrie" (supplement), "The Istanbul Protocol", the Monographs of the Classification Section, "Women's Mental Health", "Depression of Women", "Mental Health: a Transdisciplinary Perspective"* etc). Additionally, a great number of videos and Webcasts have been produced by the Sections. Most sections have produced chapters in books edited by the WPA, and 17 Sections have produced educational programs (the Sections on Mental Health Retardation, Old-age Psychiatry, Ecology, Psychiatry and Mental Health, Forensic Psychiatry, Measurement Instruments in Psychiatric Care, Psychiatry and Human Sexuality, Mental Health Economics, Interdisciplinary Collaboration, Neuroimaging in Psychiatry, Classification and Diagnostic Assessment, Emergency Psychiatry, Informatics and Telecommunications, Personality Disorders, Interdisciplinary collaboration, Forensic Psychiatry). Twelve educational programs have been produced in the last triennium.

Consensus or position statements

Twelve (12) Sections have produced 17 consensus or position statements (the Sections on Old-age Psychiatry, Preventive Psychiatry [x2], Ecology, Psychiatry and Mental Health, Psychiatric Rehabilitation, Conflict Management and Resolution, Private Practice [x2], Occupational Psychiatry, Mass Media and Mental Health [x2], Biological

Psychiatry, Psychiatry and Human Sexuality [x2], Womens' Mental Health [x2]) and one intersectional position statement on Physician Impairment with Mental Illness. Five of these statements have been produced in the last triennium.

The WPA Sections' Newsletter

After a productive term and the production of six issues, the "*Newsletter*" has finished its career and has been upgraded to a Bulletin, "*Science and Care*".

"Science and Care", the Bulletin of the WPA Scientific Sections

The Bulletin is more upgraded and appears more frequently (four times annually) than the Newsletter. Five issues have been published (at the time of submission of this report). It has been received very favorably as shown by the responses to the General Survey.

Collaboration with the Member Societies

- *WPA National Congress Educational Courses Initiative*
  This program involves organizing courses by the Sections during Member Societies' national congresses. Courses have been organized in various countries (especially in educationally-deprived areas) and have been received very positively.
- *Participation of Sections' chairs in the Educational Network of Consultants*
- *Link of Member Societies' Sections with WPA Sections*

Research

Research is carried out individually by members of each Section, within the framework of the activities of the Section, between Sections and between Sections and other WPA components (eg, member Societies). Lately, the WPA Executive Committee has decided to encourage the research activities of the Sections by funding a substantial number of research projects and as a result of this, 18 research projects have been submitted.

Scientific Meetings

The sections have organized or have co-sponsored 29 Scientific Meetings during the last triennium.

The Scientific Sections' Membership Directory

In recognition that strong communication is the lifeline of any organization, the Sections' Membership Directory was constructed, distributed to the WPA components, and uploaded on the WPA website. This database contains over 2000 entries. It will be updated periodically with a process of systematic annual reports.

The WPA Intersectional Congress

The first Intersectional Congress but also the first Electronic Congress in the history of the WPA was held in Athens in March 2005. Practically all sections contributed with update talks, symposia, and

workshops. All abstracts and the complete Power-Point presentations are available on the WPA website. On the basis of the contributions the second volume of “Advances in Psychiatry” was produced.

Conclusion

The Scientific Sections of the World Psychiatric Association provide a rare opportunity to the psychiatric community. The opportunity arises from the availability of the Section to be used by the psychiatric community as advisors and experts (through consensus statements, guidelines, and the WPA electronic educational services) as driving forces for the dissemination of scientific information (through scientific meetings, educational programs, and publications) and for the production of new information (through research).

The psychiatric community is already making use of these services. Let us hope that this will continue and intensify to the benefit of our discipline and our patients.

Bibliography

1. Christodoulou GN, ed. *Advances in Psychiatry*. Athens, Greece: Beta Medical Publishers. 2002:1-232.
2. WPA Planning Committee. The Evaluation of the WPA strategic plan 2002-2005. 2005.
3. Science and Care, the Bulletin of the WPA Scientific Sections, issues 1-4, 2004, and 1-3, 2005.

George Christodoulou, Professor of Psychiatry, President, Hellenic Psychiatric Association, President, Hellenic Centre for Mental Health and Research, 11 Papadiamantopoulou str. 115 28 Athens, Greece
E-mail: gchristodoulou@ath.forthnet.gr

History of psychiatry

Advances in Psychiatry (Editor: G. N. Christodoulou)
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Recent advances in research on the history of psychiatry. Chances and limitations of the global perspective

Paul Hoff
Section on History of Psychiatry, World Psychiatric Association

Introductory remarks

In comparison to other fields of psychiatric research, eg, descriptive psychopathology or brain imaging, History of Psychiatry is even more heterogeneous. It consists of many different scientific cultures and traditions. This fact makes simple comparisons between single issues or concepts useless. The questions discussed here are the core issues of WPA's section on the History of Psychiatry: how can we develop strategies to bring together significantly different approaches from all parts of the world? How can we avoid granting too much influence to one concept (usually the concept oneself is applying, eg, the western perspective)? But how can we also avoid to overestimate the power of the global perspective?

Contrary to most official statements, the historical perspective is still not generally accepted as a practically relevant scientific field within medicine. Quite a lot of psychiatrists would regard History of Psychiatry as an interesting, but not really core topic, if one wants to practise psychiatry. It is only in the last two or three decades that a gradual change takes place in this regard. From the many reasons for this, two shall be mentioned here: first, probably in conjunction with strong explanatory paradigms from neurobiology, eg, in schizophrenia or depression research, classical authors like Wilhelm Griesinger, Carl Wernicke, Emil Kraepelin, or Eugen Bleuler and their basic concepts of psychiatry are more closely discussed because there often is a striking analogy between their and our questions, sometimes even an analogy between their and our answers (Hoff 1994, Hoff and Hippius 2001, Scharfetter 2001). Second, in Germany and other countries–decades after the end of WW II–thorough research activities on psychiatry during the nazi regime were finally established, though late enough. This process stimulated the dialogue between psychiatrists, social

historians and philosophers in general (Engstrom and Roelcke 2003, Payk 2004).

Given this framework, I would like to address–from my perspective as the chairman of the WPA Section on History of Psychiatry–the following more down-to-the-earth topics: 1) Why do we need History of Psychiatry as an academic discipline? 2) What are the main areas of research in the field of History of Psychiatry and what are the most important recent developments? 3) In what way can the global perspective improve the scientific activities of the field–and in what way may it be even hindering? I will give a brief outline only, focusing on the central issues that are of relevance to all historians of psychiatry, whatever part of the world they are coming from. I do not quote any literature here because–given the enormous scope of our topic–this would mean to present either a kind of random and superficial selection or a very long list not useful in this context.

Why do we need History of Psychiatry?

There are four major arguments for the relevance of History of Psychiatry as an academic discipline:

The "historical" argument

We need History of Psychiatry to collect documents and other historical sources on psychiatric authors, concepts and institutions and to understand their position within the many different and conflicting scientific traditions of psychiatry.

The "practical" argument

It is not only a theoretical thing to deal with History of Psychiatry, but also a highly pragmatical one. This has to do with the fact that "mental illness", whatever definition one might apply, will never be just one self-explaining concept. Different approaches to define "mental illness" have significant impact on diagnosis and therapy, eg, the several controversial concepts on "borderline states" ending up with completely different diagnostic procedures (operationalized vs heuristic) and therapeutic options (interpretation of conflicting personality structures and their development since childhood, vs skills training, vs mood-stabilizing or other psychotropic drugs). Of course, modern psychiatry more and more tries to integrate different approaches in order to find the most effective treatment for the individual patient. But the point here is, that there indeed are significantly different and practically relevant ways to conceptualize major psychiatric issues. And to fully understand this we depend on the historical dimension.

The "theoretical" argument

This argument is called theoretical because it refers to the risk of any given psychiatric theory to become uncritical, "narrow-minded" and–in the worst case–dogmatic. And if one looks at the

history of our field closely it becomes evident that dogmatic positions in fact did occur in every psychiatric line of thought. As discussed elsewhere in greater detail, there are at least three major concepts of mental illness: the biological or naturalistic one ("mental illness is a brain disease"), the psychological or heuristical one ("mental illness is an understandable reaction or development within the patient's biography") and the nominalistic one ("mental illness can at present not be sufficiently defined as a real object, eg, as a brain disease; however, we can develop operationalized criteria for the terms we use to describe mental illness, like schizophrenia–the ICD 10/DSM IV approach) (APA 2000, WHO 1991). Each of these different ways of understanding mental illness may evolve into a dogmatical point of view: the biological or, better, neuroscience approach could turn into "brain mythology", the psychological and heuristic perspective into "psychologism" and social psychiatry into some kind of "social mythology", if these methods are not carefully applied according not only to their possibilities and advances, but also to their limitations. The key message in our context is: detection and prevention of psychiatric myths strongly depend on historical knowledge.

The "political" argument

Psychiatry has a special responsibility not only towards patients, but also towards society. For example, no other medical specialty is so often involved with involuntary admissions and treatments as psychiatry, no other medical specialty has such a close and complex relationship to jurisprudence like (forensic) psychiatry. To meet the demands arising from this special situation adequately, psychiatry cannot do without the historical and the theoretical (especially epistemological) perspective and the perspective of personal autonomy (Hoff 2005).

Main topics and recent developments in research on History of Psychiatry

One can differentiate three main areas of research in History of Psychiatry: history of institutions (ie, hospitals, scientific societies, institutions of social welfare), conceptual history (ie, the development of core concepts like psychosis, neurosis, depression), and biographical history (ie, life and work of important figures in the history of the field).
Regarding the steps that research in History of Psychiatry has taken in recent years, positive and negative developments can be described.

A definitely *positive* fact is the growing interest in (and even impact of) theoretical issues (history, philosophy, ethics) in the psychiatric community. As a consequence, more sound empirical and conceptual research was done in recent years, especially more interdisciplinary research. As already mentioned, this is partially due to the strong hypotheses on the etiology of mental disorders and on mental phenomena in general brought forward by the field of neuro-

science. These are generating interesting and controversial debates for example about the nature of qualitative mental phenomena ("qualia") and about decision-making and wilful action ("free will").

But some *negative* aspects must not be forgotten:

- Often History of Psychiatry is still regarded as an interesting addendum, but not as a core topic; people think that one *may* do research in history, but *do not have to* if approaching or practising psychiatry as a practical or scientific field. This could be called the "l'art pour l'art-hypothesis".
- The field of History of Psychiatry often has only little, if any solid representation in curricula from the undergraduate to the postgraduate level.
- And, not the least important aspect, working on the History of Psychiatry as a medical academic is still not very attractive from a career point of view. At times, it may prove difficult to convince medical faculties that first rate research projects on historical topics are of the same scientific value as, for example, studies on clinical psychopharmacology or brain imaging.
- Raising money for research activities in the History of Psychiatry and also for organizational purposes (eg, running the WPA Section) seems to become increasingly difficult. This fact in a way contradicts the rising interest in historical and conceptual aspects mentioned earlier, but nevertheless it is the case.

The global perspective. Chances and limitations

Chances

The global perspective seems an appropriate approach for psychiatry regarding its significant cultural determinants. Ideally, culturally different approaches, eg, to the concept of "mental illness", will learn from each other, especially when basic issues like mind-body-relationship or the problem of objective vs subjective methods in psychiatric research are discussed. International cooperation, in addition, will strengthen the academic field of History of Psychiatry in general.

Limitations

There are two arguments that demonstrate major limitations of the global perspective: the *theoretical argument* states that intercultural differences –especially as for basic concepts–are much more prominent in History of Psychiatry than in natural sciences. And these are not only quantitative, but often significant qualitative differences. Thus, cultural differences cannot be forced away by some global network in research nor must they be ignored. On the contrary, they have to be carefully registered and respected.

Following the *practical argument*, as a consequence of the conceptual hetero-

geneity in History of Psychiatry in different cultures, it is difficult to initiate and keep alive an international academic dialogue, for example between WPA Sections, between universities or in large research projects.

Concluding theses

1. History of Psychiatry is not “l’art pour l’art”. It is of crucial importance for the understanding and development of theoretical and practical issues in our field.
2. Research on History of Psychiatry is necessarily an interdisciplinary project.
3. Although in recent years much research into the History of Psychiatry has been generated, there still is a great backlog.
4. The most promising opportunity for WPA’s Section on History of Psychiatry is to create a scientific network linking together researchers from different countries who deal with similar topics. But this must be done without underestimating or even ignoring their specific local context. In other words: beyond doubt, the global perspective is highly important, but it will never be able to replace genuine locally-based research. But this is also true the other way round: research on specific local, regional, or national issues will be significantly enriched by the intercultural perspective. A close cooperation between WPA’s Section on History of Psychiatry and the Sections of the member societies could well become the cornerstone of a successful development in this area.

Bibliography

1. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders. 4th edition, Text Revision (DSM-IV-TR)*. Washington, DC: APA.
2. Engstrom EJ, Roelcke V (eds). Psychiatrie im 19 Jahrhundert. Forschungen zur Gesischte von psychiatrischen Institutionen, Debatten und Praktiken im deutschen Sprachraum. Basel, Switzerland: Schwabe; 2001.
3. Hoff P. Emil Kraepelin und die Psychiatrie als klinische Wissenschaft. Ein Beitrag zum Selbstverständnis psychiatrischer Forschung. Monographien aus dem Gesamtgebiete der Psychiatrie, Band 73. Berlin, Germany, Springer;1994.
4. Autonomie und psychiatrische Krankheitsmodelle – Die historische und aktuelle Perspektive. In: Roessler W, Hoff P, eds. *Psychiatrie zwischen Autonomie und Zwang*. Heidelberg, Germany: Springer;2005:7-25.
5. Hoff P, Hippius H. Wilhelm Griesinger (1817-1868)–sein Psychiatrieverständnis aus historischer und aktueller Perspektive. *Nervenarzt*. 2001;72:885-892.
6. Payk TR. Degenerationslehre und Euthanasie. In: Bruene M, Payk TR, eds. Sozialdarwinismus, *Genetik und Euthanasie*. Stuttgart, Germany: Wissenschaftliche Verlagsgesellschaft;2004:9-16.
7. Scharfetter C. Eugen Bleuler–seine Psychopathologie und Schizophrenielehre. In: Hell D, Scharfetter C, Moeller A, eds. *Eugen Bleuler–Leben und Werk*. Bern, Switzerland: Hans Huber;2001:31-36.
8. WHO (World Health Organization). *Tenth Revision of the International Classification of Diseases, Chapter V (F): Mental and behavioural disorders (including disorders of psychological development). Clinical descriptions and diagnostic guidelines*. Geneva, Switzerland: WHO;1991.

Paul Hoff, Professor of Psychiatry, University of Zurich, Department of Psychiatry, Lenggstrasse 31, P.O. Box 1931, CH 8032 Zurich, Switzerland
E-mail: paul.hoff@puk.zh.ch

Classification of Psychiatric Disorders

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Advances in psychiatric diagnosis and classification

Carlos E. Berganza, Juan E. Mezzich, Cláudio Banzato
Section on Classification, Diagnostic Assessment and Nomenclature,
World Psychiatric Association

Introduction

Over a century has passed since the presentation of the Bertillon International Classification of Causes of Death at the meeting of the International Institute of Statistics in Chicago, 1893, and more than three decades since a new era of systematization emerged in psychiatric nosology with the publication of Feighner's *Diagnostic Criteria for Use in Psychiatric Research*. These events and others that led to the Third Edition of the APA's *Diagnostic and Statistical Manual of Mental Disorders* have affected profoundly psychiatric practice across the world.

Diagnostic schemas, as consensual formats for describing morbid conditions, have emerged since the dawn of humankind, embedded within their time and culture. By recently adopting explicit diagnostic criteria and rules, and a multiaxial diagnostic framework, psychiatric diagnosticians attempted to become minimally inferential and maximally comprehensive in the formulation of the patient's clinical condition.

Emphasis on reliability and user acceptability

The descriptive nosological model advanced by DSM-III allowed important gains in reliability and acceptability of systematic diagnosis in psychiatry, and provided a "common language" that stimulated psychiatric research. To DSM-III (1980) followed in rapid succession DSM-III-R (1987), ICD-10 for clinical use (1992), ICD-10 for research (1993), DSM-IV (1994), and DSM-IV-TR (2000). They were all widely used and successful manuals, revealing the need for systematization and order in the diagnostic process.

DSM-III was a landmark achievement for psychiatry; however, it was criticized by its disregard for the subjective constituents of psychopathology. Additionally, fundamental questions and controversies remain in psychiatric nosology regarding, for example, the number and

types of major classes of disorders, arrangement of subclasses, and the hierarchical relationships among categories. Furthermore, how etiopathogenic perspectives—from genetics, to psychodynamics, to general systems—may in the future contribute enriched and more valid formulations of mental disorders, continues to be a source of disagreement. It has been argued that without genotypes, objective tests, clues to pathogenesis, or adequate family studies most current diagnoses lack true empirical validation. However we conceptualize it, lack of true validity in psychiatric diagnosis represents an important threat to clinical work, research, education, and policy making in public health across the world.

Return to validity and usefulness

Conceptual perspectives

The meaning of validity in the context of diagnosis has not been adequately clarified, although the term has acquired relevance as diagnoses must represent meaningful statements in terms of predicting outcome with and without specific interventions. Both reliability and validity are concepts imported from psychometric theory where they are related to consistency and accuracy of assessment instruments, respectively. Extrapolated to psychiatric nosology, it can be said that a diagnostic category would have validity if it provides clinically meaningful information about the nature of the morbid condition in question, such as etiology, pathophysiological processes, identifying symptoms, course, and prognosis.

In psychiatry, the first to advance formal methods to determine the validity of diagnoses were Robins and Guze (1970). More recently, Kendell and Jablensky (2003) raised questions about the implicit disease entity assumption permeating current psychiatric nosologies, which disregards the strong possibility that no natural boundary may exist to separate one specific mental disorder from other mental disorders or from no mental disorder at all. They contend that most psychiatric diagnostic categories are "arbitrary loci in a multidimensional space"; that validity cannot be equated with known etiology; and that psychiatric nosology still depends on the definition of most of its morbid conditions by their syndromes. They also provide innovative rules for determining validity in psychiatric nosology.

Elaborating on the concept of clinical utility, First et al (2004) propose that future revisions of DSM empirically demonstrate improvement in clinical utility to clarify whether the advantages of changing the diagnostic criteria outweigh potential negative consequences. Admitting that no formal effort was made to empirically determine actual improvements in clinical utility during the revision process of DSM-IV, they propose that, in the future, any nosological category in the DSM should be evaluated by considering: 1) its impact on the use of the diagnostic system; 2) whether it enhances clinical decision making; and 3) whether it improves clinical outcome.

Institutional perspectives

As the diagnostic manuals became more widely accepted internationally, concerns about validity and usefulness of psychiatric nosology were raised by their users. Clinicians complained of the diagnostic model's complexity for use by the busy clinician in the everyday work and of the lack of validity of a number of categories and subcategories described by the manuals; frequently, a difference in diagnostic label made no difference for treatment planning. Researchers pointed out the lack of comparability of the diagnostic categories defined by phenomenology with the findings derived from studies of biological variables (eg, molecular genetics and neuroimaging). And cultural psychiatrists and anthropologists complained of the poor applicability of the diagnostic statements contained in the manuals to cultural minorities in developed societies or to culturally diverse communities abroad.

National and regional adaptations

Several efforts were made to increase the usefulness of the manuals in different settings and different regions of the world. Apart from the APA's DSM system, a number of other national and regional psychiatric societies developed their own adaptations of the WHO system. Examples of these adaptations are: the Third Cuban Glossary of Psychiatry; the third edition of the Chinese Classification of Mental Disorders; and the Latin American Guide for Psychiatric Diagnosis.

As a consequence of all these efforts attempting to reconcile a universal language with the local needs of patients in different regions of the world, the focus of attention turned to more fundamental issues concerning validity of psychiatric diagnosis. This led to the consideration of complex questions about the conceptual, epistemological and methodological foundations of diagnostic models and processes.

Global programs for the development of valid ICDS

Three leading institutions concerned with the development of ICDS for psychiatry, namely, WHO, APA, and WPA's Section on Classification, Diagnostic Assessment and Nomenclature reacted to the challenge in line with their respective responsibilities and goals.

WHO has, since its creation in 1948, the constitutional responsibility to review and update periodically the Family of International Classifications (FIC) of which, the International Classification of Diseases and Related Problems of Health, is an integral component. Besides the Office of Classification, Assessment, Surveys and Terminology (WHO/CAS), directed by Bedirhan Üstün at the Department of Evidence for Health Policy, the WHO FIC/ICD Collaborating Centers, distributed across the world, are the bodies in direct charge of leading such review and update process.

WHO/CAS has collaborated with APA in reviewing and updating DSM. In

addition, WHO/CAS supported WPA's efforts to update and review ICD-10 through a series of activities that are inscribed within a long-standing institutional collaboration in search of a true ICDS for psychiatry. More recently, WHO has made public its Business Plan for Classifications at the Reykjavik annual meeting of the WHO/FIC Collaborating Centers, in October 2004, which spells out "strategic directions, business drivers and required resources, potential partners and future actions…" in order to bring ICD to the XXIst century.

APA, through a steering committee headed by Darrel A. Regier, started a "DSM-V planning process" in 1999. The initial phase of such process was completed with the publication in 2002 of *a Research Agenda for DSM-V*. The main body of this volume is made up of six "white papers" distributed along an equal number of chapters addressing critical conceptual issues to set the epistemological framework for the fifth revision of the APA's diagnostic manual. Such issues include: 1) Basic nomenclature issues for DSM-V; 2) Neuroscience research agenda to guide development of a pathophysiologically-based classification system; 3) Advances in developmental science and DSM-V; 4) Personality disorders and relational disorders: a research agenda for addressing crucial gaps in DSM; 5) Mental disorders and disability: time to reevaluate the relationship?; and 6) Beyond the funhouse mirrors: research agenda on culture and psychiatric diagnosis.

Anticipating that the probable publication of DSM-V may take place in 2010, editors concede that the research agendas suggested by this volume may not bear fruit in time for this revision process; however, they consider that this broad research they are proposing is necessary to "fundamentally alter the limited classification paradigm now in use" suggesting that a new and more appropriate paradigm may result from "an understanding of etiological and pathophysiological mechanisms…[of mental illness]… that can improve the validity of our diagnoses and the consequent power of our preventive and treatment interventions".

APA continues the preparation for a major review of DSM and a webpage has been created in order to keep the public and professionals informed about the plans for DSM-V as well as the ongoing effort to enrich the research base in advance of starting formal work on DSM-V. In addition, this website provides an opportunity for anyone interested to alert the leaders of the project to problems in the DSM-IV that one may have encountered and to provide suggestions for DSM-V. This site named "DSM-V Prelude Project" can be accessed at http://www.dsm5.org/ to stay informed about the progress of the revision process.

To understand WPA's role in the development of ICDS, it is important to remember its institutional dimensions. WPA is integrated by more than 130 national psychiatric societies from all

corners of the globe, representing around 200,000 psychiatrists worldwide. Its technical "backbone" is composed by over 60 scientific sections covering a wide range of subspecialties within psychiatry, including a very active section on classification, diagnostic assessment and nomenclature integrated by more than 75 experts from a large number of countries. WPA has developed an impressive international educational network, producing several educational programs, including one on ICD-10. Its capacity for knowledge dissemination has no parallel with the organization of a World Congress of Psychiatry every three years, several international and regional congresses in between, and sponsoring many national and regional psychiatric congresses of its member societies. It publishes, in addition to a large number of thematic volumes with the collaboration of recognized experts across the globe, *World Psychiatry*, a high-quality journal, which is distributed free in electronic and printed forms in English, Spanish, and Chinese. Finally, WPA has a very dynamic webpage and an electronic bulletin, which disseminate news and information about important scientific and professional issues of concern to psychiatrists across the globe.

Another important institutional asset is the unambiguous commitment of WPA leadership as officially stated by its Executive Committee during a meeting in Cairo, February 7, 2003, supporting the developments of ICDS, including a strong collaboration with WHO, and acknowledging the active role of the Section on Classification as part of these new developments (see, Section of Classification Newsletter, March 2003). A critical byproduct of this institutional commitment is the active involvement of the scientific sections of WPA in the developmental process of new ICDS as reflected by the symposium on "The Construction of Future International Classification and Diagnostic Systems: The Role of the WPA Scientific Sections" that took place at the WPA Regional and Intersectional Congress in Athens, March 2005.

The WPA Section on Classification, in close collaboration with WHO/CAS, has organized a series of activities to develop the epistemological bases and the strategic framework for a truly ICDS, addressing not only issues of reliability, validity and utility of nosology, but also paying attention to the whole diagnostic process with the purpose of serving the person of the patient across different settings and differing cultures.

These activities include:

1. The planning, execution, and publication of an International Survey on the Use of ICD-10, and Related Diagnostic Systems (Mezzich, 2002). The planning, organization, and execution of seven major symposia and workshops, within the framework of WPA international academic activities, to discuss fundamental issues related to the review process of ICDS.
2. Three key publications: International Classification and Diagnosis: Critical

Experience and Future Direction, in *Psychopathology*, 2002 (Mezzich and Üstün, 2002); Essentials of the WPA International Guidelines for Diagnostic Assessment (IGDA) in the *British Journal of Psychiatry* (Mezzich, Berganza, von Cranach et al, 2003); and The Philosophical and Methodological Foundations of Psychiatric Diagnosis (Banzato, Mezzich, and Berganza, *Psychopathology*, in press).

3. The establishment of a special WPA-WHO Workgroup, under the leadership of Professor Juan E. Mezzich, President Elect of WPA, on Conceptual and Methodological Bases for New ICDS. Broadly, the ICDS Workgroup shall work closely with the WPA Classification Section membership, all other Sections and other pertinent structures of WPA, the Office on Classification, Assessment, Surveys and Terminology and the Department of Mental Health and Substance Dependence of the World Health Organization, as well as national classification research groups and other experts in the field to accomplish its objectives towards scientifically strong, innovative, and more useful international classification and diagnostic systems. In addition to Professors Mezzich (Peru, USA), and Berganza (Guatemala), this group is integrated by a distinguished group of academicians from different subspecialties and corners of the world, including: Steven E. Hyman (USA), Yan-Fang Chen (China), Ronald Kessler (USA), Graham Melsop (New Zealand), Bedirhan Üstün (Turkey, Switzerland), K.F. Schaffner (USA), K.W.M. Fulford (UK), Lawrence Kirmayer (Canada), Assen Jablensky (Australia), Rachel Jenkins (UK), John S. Robert (Canada), Christoph Mundt (Germany), Michel Botbol (France), Claudio Banzato (Brazil), and Levent Kuey (Turkey). This group has elaborated a blueprint for the development of the mental health component of ICD-11, recently presented by Mezzich (2004) to the FIC Network Meeting in Reykjavik, Iceland, in October, 2004.

Conceptual bases for future ICDS

First, an agreement must be reached on the conceptual framework of these systems. For some, basing them on biological grounds seems inevitable and the only rational way to follow. This approach, usually construed as "evidence-based" should accordingly profit from the advances of neurosciences in the last few decades, leading psychiatry to become a true scientific medical specialty. Others concede that, although the search for pathognomonic biological markers of "mental" illness will be necessary to make appropriate psychiatric diagnoses, such biological information must be taken as complementary to symptom-based diagnostic categories.

A major controversy in the field of nosology pertains precisely to the emphasis psychiatric nosology should place upon biological variables to define morbid conditions of concern to psychiatrists across the world. It is true that a

strong biological approach would provide psychiatry with a solid base to become an "evidence-based" medical discipline since biological variables are far more clear-cut and easy to define and reduce to operational terms. According to this view psychiatric nosology may reach the solid organization level of other fields of the natural sciences where every morbid condition will find its natural place among others, even before it is actually "discovered" out there in the realm of clinical psychopathology.

The concept of mental illness

A concept of disorder (disease or illness) has theoretical and practical implications for psychiatric nosology, and represents a critical dilemma for the field. Psychiatric nosology must address public concerns about mislabeling behaviors, by providing reliable and valid diagnostic criteria and strict diagnostic rules. On the other hand, organizing mental disorders in a "Mendeleevian" fashion advances an inaccurate view of mental disorders as natural categories out there to be discovered. Ideally, a definition of mental disorder would dictate which conditions to include in or exclude from a new nosology. However, a new nosology of mental disorders requires that we acknowledge the diverse nature of these morbid conditions and recognize that there is no unitary conceptualization of disorder to inform the organizational principles of the whole field (Berganza, Mezzich, and Pouncey, in press).

An ongoing discussion in the conceptual analysis literature exposes the weaknesses of the concept of mental disorder currently in use in psychiatric nosology, and illustrates the virtually insurmountable complexities in arriving at a definition that satisfactorily embraces all possible scenarios where psychiatric intervention is relevant. Psychiatry confronts difficulties delineating the boundaries between disorder and non-disorder, and between physical and mental domains, conceived by some as the "hardware" and the "software" of brain functioning. Consequently, serious attention to conceptual issues appears indispensable to clarify the organizational rules of a new international psychiatric nosology, and we ought to recognize that regardless of the immense amount of efforts and talent invested, the issue is far from settled in the field.

A look at the future

Although the two more visible international nosological systems in psychiatry (DSM-V and ICD-11) are not expected to be published before 2010 and 2011 respectively, extensive and profound discussions are already in progress to review critical experiences in the use of these systems at the clinical, research, public health, law, education, and training levels, as well as in other fields of concern to psychiatry. Developments in the neurosciences provide the resources to better understand the neurophysiological underpinnings of human behavior, as well as important tools to effectively intervene when such behavior becomes dysfunc-

tional or harmful. This creates the temptation to assume that it is possible to organize morbid conditions of concern to our specialty around such neurophysiological underpinnings. However, the nature of our specialty marked by the type of conditions with which it is concerned demand that we reflect very carefully on the implications for the future of our patients, and our practice as well. The opportunity to advance the scientific base of our discipline is there in the present and will increase in the future as new discoveries improve our understanding of the human brain and its functioning. We only hope that science does not ignore the ethical implications of our professional actions.

Abstract

Over a century after the Bertillon proposal for an International Classification of Causes of Death, and over three decades since the publication of the Feighner diagnostic criteria for psychiatric research, psychiatry struggles with a nosology that remains a work in progress. Although major advances were accomplished with the development of a more reliable diagnostic system, the conceptual and strategic bases to develop a truly international psychiatric nosology are still subject to controversy. In medicine and psychiatry the development of diagnostic and classification systems (ICDS) is a never-ending task to better represent reality in the service of the patient. This presentation explores the landmark activities of those institutions concerned with the development of ICDS for psychiatry over the last decades, emphasizing the critical discussions and perspectives advanced during the last four years. The role of the World Psychiatric Association (WPA) Section on Classification, Diagnostic Assessment and Nomenclature is described in the framework of its long-standing collaboration with the World Health Organization (WHO), the American Psychiatric Association (APA) and other psychiatric societies across the world.

Bibliography

1. American Psychiatric Association. *Diagnostic and statistical manual of mental disorders. Fourth Edition, Text Revision (DSM-IV-TR).* Washington, DC: APA; 2000.
2. Asociación Psiquiátrica de América Latina. *Guía Latinoamericana de Diagnóstico Psiquiátrico (GLADP)* [Latin American Guide for Psychiatric Diagnosis]. Guadalajara, Mexico: APAL; 2004.
3. Berganza CE, Mezzich JE, Pouncey. Concepts of disease (illness, disorder) in psychiatry: Its relevance for psychiatric nosology. *Psychopathology*. 2005. In press.
4. Chinese Psychiatric Association. *The Chinese Classification of Mental Disorders*, ed. 3 (CCMD-3). Shandong: Shandong Publishing House of Science and Technology; 2001.
5. First MB, Pincus HA, Levine JB, Williams JBW, Üstün B, Peele R. Clinical utility as a criterion for revising psychiatric diagnoses. *Am J Psychiatry*. 2004;161:946-954.
6. Fulford KWM. The debate about mental illness. In: Moral Theory and Medical Practice. Cambridge: Cambridge University Press; 1989:3-24.
7. Kendell R, Jablensky A. Distinguishing between the validity and utility of psychiatric diagnoses. *Am J Psychiatry*. 2003;160:4-12.
8. Kupfer DJ, First MB, Regier DA. *A Research Agenda for DSM-V*. Washington, DC: American Psychiatric Association; 2002.
9. Mezzich JE. International survey on the use of ICD-10 and related diagnostic systems. *Psychopathology*. 2002;35:72-75.
10. Mezzich JE. A Blueprint for the Development of the ICD-11 Mental Health Component. Paper presented on behalf of the WPA-WHO Workgroup on International Classification and Diagnostic Systems at the WHO Family of International Classification Network Meeting, Reykjavik, Iceland, October 23-29, 2004.
11. Mezzich JE, Berganza CE, von Cranach M, et al. The WPA International Guidelines for Comprehensive Assessment. *Br J Psychiatry*. 2003;182(suppl 45):s37-s66.
12. Otero-Ojeda A, Rabelo-Pérez V, Echazábal-Campos A, et al. Tercer Glosario Cubano de Psiquiatría [Third Cuban Glossary of Psychiatry]. Havana, Cuba: Hospital Psiquiátrico de la Habana; 2001.
13. Robins E, Guze SB. Establishment of diagnostic validity in psychiatric illness: its application to schizophrenia. *Am J Psychiatry*. 1970;126:983-987.
14. Sadler JZ. Horsefeathers. A commentary on "Evolutionary versus prototype analyses of the concept of disorder". *J Abnorm Psychol*. 1999;108:433-437.
15. Wakefield JC. Disorder as harmful dysfunction: A conceptual critique of *DSM-III-R's* definition of mental disorder. *Psychol Rev*. 1992;99:232-247.
16. Wakefield JC. Evolutionary versus prototype analyses of the concept of disorder. *J AbnormPsychol*. 1999;108:374-399.
17. World Health Organization. *WHO Business Plan for Classifications*. Geneva: WHO; 2004.
18. World Psychiatric Association WPA Regional and Intersectional Congress "Advances in Psychiatry": Abstracts Issue. *Psychiatr, J Hellen Psychiatr Assoc*. 2005;16(suppl 1):72-78.

Carlos E. Berganza, Professor of Psychiatry, San Carlos University School of Medicine, Guatemala, Guatemala, CA, Clinica de Psiquiatria Infantil, Avenida La Reforma, 13-70 zona 9, Edificio Real Reforma, Suite 11-B, Guatemala, Guatemala
E-mail: carlosmd@intelnett.com

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Current advances in intellectual disabilities (mental retardation)

L. Salvador-Carulla, H. Costello, N. Bouras
Section on Psychiatry of Mental Retardation, World Psychiatric Association

Introduction

In spite of the fact that mental retardation or intellectual disability (ID) is included as a mental disorder in all international manuals, and that over 30% of people with ID have a comorbid psychiatric disorder, ID has always been a marginal area in psychiatry. In many countries little or no training is provided on ID during the medical career or during psychiatric specialization. However, the last decade has produced a mounting research in this area, mainly related to psychiatric assessment, genetics and service research. ID faces problems that eventually become relevant to general psychiatry, as it happened in the field of vocational rehabilitation, or in the assessment and categorization of behavioral problems.

Terminology and classification

The term mental retardation (MR) is considered outdated and has changed to intellectual disability (ID) in many countries and international organizations. This change has produced a useful international debate. The American Association on Mental Retardation (AAMR) promoted a workshop and published an interesting series of papers on this issue in 2002 (AAMR, 2001). On the other hand, medical and psychiatric associations have been absent from this controversy while following a “fact” policy and adopting the term ID without any critical appraisal. As many user’s organizations question the word “disability” itself, this term may become outdated in the coming future. The underlying problem relates to nosology. “Mental retardation” is neither a disease or a disability, but a meta-syndromic descriptor, similar to dementia that encapsulates a variety of clinical conditions (including syndromes, disorders and diseases), characterized by an early cognitive deficit. “Mental retardation”, “Intellectual disability” and “Early cognitive deficit” may be considered synonymous.

International classification manuals such as ICD-10 and DSM-IV-TR, have

limitations when used with people with intellectual disabilities, and cannot be applied in severe and profound cases. Misdiagnosis is due to self-report unreliability, limitations in cognitive skills and ability to articulate complex concepts such as depressed mood, and eagerness to please, different symptom expression, behavioral equivalents, and problems in classifying behavioral phenotypes. Three relevant classification systems have been published in the last five years: the DSM-IV-TR manual for MR/ID, the DC-LD and the AAMR-10. DSM-IV-TR manual for MR/ID has been developed in cooperation with the National Association for the Dually Diagnosed (NADD); and it is intended to facilitate a more accurate diagnosis in persons with intellectual disabilities (APA/NADD, 2005). The UK Royal College of Psychiatrists has published the "*Diagnostic Criteria for Psychiatric Disorders for Use with Adults with Learning Disabilities /Mental Retardation*" (DC-LD) which is intended to complement ICD-10, particularly in moderate, severe, and profound ID (Royal College of Psychiatrists, 2001). It incorporates a new multiaxial classification system which provides a useful coding for problems related to ID *(Table I)*.

The AAMR-10 (AAMR, 2002) is a comprehensive assessment system based on the International Classification of Functioning. It incorporates a full assessment of skills and supports in people with ID, becoming a key area for assessing the feasibility, validity, and reliability of ICF in a syndromic grouping. However, ID is here defined as a "disability" and this statement may be challenged in the coming future (see above discussion).

Psychiatric assessment

A series of epidemiological studies provide information on prevalence of psychiatric disorders in child and adolescent people with ID (Dekker and Koot, 2003), adults (Moss et al, 2000; Deb et al, 2001i) and aging population (ie, dementia) (Zigman et al, 2004). Rates range between 15% and 35%. The inclusion or exclusion of behavioral problems as a psychiatric disorder has a huge impact on the estimated prevalence of mental health problems. Deb et al, 2001 suggest that if behavioral disorders, personality disorders, autism and ADHD are excluded, then the overall rate of psychiatric illness does not differ significantly from the general population. Underdiagnosis is a significant problem. For instance, the rate of hidden morbidity for psychiatric disorders in vocation-

Table I. Multiaxial system in DC-LD (Royal College of Psychiatrists, 2001)

- Axis I Level of mental retardation
- Axis II Cause of mental retardation
- Axis III Psychiatric disorders
  - Level A: Developmental disorders
  - Level B: Psychiatric illness
  - Level C: Personality disorders
  - Level D: Problem behaviors
  - Level E: Other disorders

al settings is 50% (Salvador-Carulla et al, 2000). This is particularly the case in affective disorders either because behavioral equivalents of depression are misinterpreted or due to diagnostic overshadowing (symptoms are attributed to ID). A significant advance in the recognition and the standard assessment of depression in ID has been made in the last years (Lunsky and Palucka, 2004). The European Association of Mental Health on Mental Retardation (MH-MR) has produced an excellent evidence-based review of psychiatric disorder evaluation in ID (Deb et al, 2001ii). Development of standardized assessment tools as well as modified diagnostic criteria for ID resulted in major progress in diagnosis and assessment particularly in the USA and UK. The PAS-ADD is an assessment battery based on the SCAN-Catego system which incorporates a checklist for carers, a brief semi-structured interview for professionals (Mini PAS-ADD) and a full semi-structured interview (PAS-ADD 10) which has been translated and standardized in other languages allowing international use (Gonzalez-Gordon et al, 2002). Assessment of aging population with ID has also improved considerably (McCallion and McCarron, 2004).

Behavioral problems (BP) in people with ID are a complex mix of symptoms of multiple origins. Determining whether behaviors are the result of organic conditions, psychiatric disorders, environmental influences, or a combination of these, is often very difficult. Providing a separate assessment of BP is a core element of the multiaxial diagnosis in ID. A series of papers contribute to a better understanding of the relationship between BP and mental illness (Moss et al, 2000; Deb et al, 2001i; Tsiouris et al., 2003).

Genetics and behavioral phenotypes

This is the area of research where major advances have taken place in the last five years. It may become a model for psychiatric genetics and has relevant implications for other areas of research such as schizophrenia and bipolar disorders. The more we know about the gene-to-behavior pathways in ID conditions, the greater the opportunity to develop specific models that can be applied to other psychiatric disorders. For instance, velocardiofacial syndrome provides for psychosis that may contribute to unveal the etiology of schizophrenia (Eliez et al, 2001).

Advances relate to many genetic conditions such as Prader-Willi, Fragile X, Angelman, Williams Syndrome, and others. A number of comparative studies have demonstrated the significant differences in profiles of psychopathology in genetic disorders causing intellectual disability (Einfeld, 2004).

New treatment strategies

Psychopharmacology studies in ID increased in the last years filling a vacuum in evidence research practice in this area. However, the emphasis has been

placed more in assessment, and in investigating causes and psychosocial factors more than on the pharmacological or psychological treatment. A short number of studies have suggested good efficacy of newer antipsychotics as the first-line treatment for people with ID, as well as for behavioral disorders associated with MR (Bokzanska et al, 2003). Little has been published on other psychotropic drugs such as antidepressants or anticonvulsants.

Education and training

Staff must possess the appropriate skills to promote positive mental health in service users and to participate in the assessment and treatment of those individuals with mental health problems. Given the lack of trained staff in this area, new strategies include e-learning and development of training material within a global perspective. The MEROPE group in Europe has provided an international training package for carers based on UK programs (Tsiantis et al, 2004).

Service research and health economics

The advances in this area are particularly relevant in regions where major reforms are underway such as the expanded European Union, which faces the challenges of harmonization and integration of ID. Availability and access to community residential and day services play a crucial role in supporting individuals with mental health problems. This has implications for service responses, both in terms of staffing ratios and the range of necessary staff skills. Studies on different intervention programs and service organization have been recently reviewed (Bouras and Holt, 2004). Studies on "cost of illness" reveal the relative importance of ID in relation to other psychiatric and medical conditions (Polder et al, 2002), and in relation to other types of disability (CDC, 2004).

Conclusions

In sum, individuals with ID constitute a heterogeneous group encompassing a broad range of abilities and skills. Difficulties in self-reporting along with differences in presentation challenge the validity of current assessment techniques. Nevertheless, the presence of mental health problems in a high proportion of individuals with ID indicates the importance of providing effective support and treatment strategies for addressing mental health needs. This has important implications for the characteristics of health services if mental health problems are to be adequately met.

Abstract

Major changes have occurred in Intellectual Disabilities (ID) research during the last five years. Main topics of interest are: 1) Terminology and underlying concept of ID/MR. A great international debate on the name and on the intelligence-based approach to mental retardation has taken place since 1999 on. The debate has been particularly intense in the US where the American Association of Mental Retardation (AAMR) produced a series of documents on this issue, the President Commission on Excellence in Special Education questioned the IQ testing as a diagnostic tool, and the Committee on "Mental Retardation" changed its name to "People with Intellectual Disabilities" in 2003. As an alternative, medical oriented terminology such as Early Cognitive Deficit (ECD) has been suggested. 2) Psychiatric assessment: the development of standardized assessment tools as well as modified diagnostic criteria for PWID resulted in major progress in diagnosis and assessment of PWID particularly in the USA and UK. 3) Behavioral phenotypes. This is the area of research where major advances have taken place in the last five years. It is relevant for it to become a model for psychiatric genetics and has relevant implications for other areas of research such as schizophrenia and bipolar disorders. 4) New treatment strategies. Psychopharmacology studies in PWID increased in the last years filling a vacuum in evidence research practice in this area. 5) Education and training: Given the lack of trained staff in this area, new strategies include e-learning and development of training material within a global perspective. 6) Service research and health economics. The advances in this area are particularly relevant in regions where major reforms are underway such as Eastern Europe or the expanded European Union, which faces the challenges of harmonization and integration of ID care within the health care system.

Bibliography

1. American Association on Mental Retardation (AAMR). Ad hoc Committee on Terminology and Classification. *AAMR News & Notes*. 2001;14:10-13.
2. American Association on Mental Retardation (AAMR). *Mental Retardation: Definition, Classification and System of Supports, 10th ed*. AAMR. 2002.
3. American Psychiatric Association/National Association for the Dually Diagnosed. DSM-IV-TR manual for Mental Retardation/Intellectual Disability. Washington, DC: APA/NADD; 2005.Bokszanska A, Martin G, Vanstraelen M, Holt G, Bouras N, Taylor D. (Risperidone and olanzapine in adults with intellectual disability: a clinical naturalistic study. *Int Clin Psychopharmacol*. 2003;18:285-291.
5. Bouras N, Holt G. Mental health services for adults with learning disabilities. *Br J Psychiatry*. 2004;184:291-292.
6. Centers for Disease Control and Prevention (CDC). Economic costs associated with mental retardation, cerebral palsy, hearing loss, and vision impairment--United States, 2003. *MMWR Morb Mortal Wkly Rep*. 2004;53:57-59.
7. Deb S, Matthews T, Holt G, Bouras N. *Consensus Practice Guidelines for the Assessment and Diagnosis of Mental Health Problems in People with Intellectual Disability*. London, UK: Gaskell; 2001.

8. Deb S, Thomas C, Bright C. Mental disorder in adults with intellectual disability. 1: Prevalence of functional psychiatric illness among a community-based population aged between 16 and 64 years. *J Intellect Disab Res*. 2001;45:495-505.
9. Dekker MS, Koot HM. DSM-IV disorders in children with borderline to moderate intellectual disability. I: Prevalence and impact. *J Am Acad Child Adolesc Psychiatry*. 2003;42:915-922.
10. Eliez S, Blasey CM, Schmitt EJ, White CD, Hu D, Reiss AL. Velocardiofacial syndrome: are structural changes in the temporal and mesial temporal regions, related to schizophrenia? *Am J Psychiatry*. 2001;158:447-453.
11. Einfeld SL. Behaviour phenotypes of genetic disorders. *Curr Opin Psychiatry*. 2004;17:343-348.
12. González-Gordon RG, Salvador-Carulla L, Romero C, González-Saiz F, Romero D. Feasibility, reliability and validity of the Spanish version of Psychiatric Assessment Schedule for Adults with Developmental Disability: a structured psychiatric interview for intellectual disability. *J Intell Disabil Res*. 2002;46:209-217.
13. Holt G, Costello H, Bouras N, Diareme S, Hillery J, Moss S, Rodríguez Blázquez C, Salvador-Carulla L, Tsiantis J, Weber G, Dimitrakaki C. BIOMED-MEROPE project: service provision for adults with intellectual disability: a European comparison. *J Intell Disabil Res*. 2000;44(part 6):685-696.
14. Lunsky Y, Palucka AM. Depression in Intellectual Disability. *Curr Opin Psychiatry*. 2004;17(5):359-363.
15. Martin G, Costello H, Leese M, Slade M, Bouras N, Higgins S, Holt G: An exploratory study of assertive community treatment for people with intellectual disability and psychiatric disorders: conceptual, clinical, and service issues. *J Intell Disabil Res*. 2005. In press.
16. McCallion P, McCarron M. Aging and intellectual disabilities: a review of recent literature. *Curr Opin Psychiatry*. 2004;17:349-352.
17. Moss S, Emerson E, Kiernan CK, Turner S, Hatton C, Alborz A. Psychiatric symptoms in adults with learning disability and challenging behaviour. *Br J Psychiatry*. 2000;177:452-456.
18. Polder JJ, Meerding WJ, Bonneux L, van der Maas PJ. Healthcare costs of intellectual disability in the Netherlands: a cost-of-illness perspective. *J Intell Disabil Res*. 2002;46(Pt 2):168-178.
19. Royal College of Psychiatrists. DC-LD *[Diagnostic Criteria for Psychiatric Disorders for Use with Adults with Learning Disabilities / Mental Retardation]*. London, UK: Gaskell; 2001.
20. Salvador-Carulla L, Rodríguez-Blázquez C, Rodríguez de Molina M, Pérez-Marín J, Velázquez R. Hidden psychiatric morbidity in a vocational programme for people with intellectual disability. *J Intell Disabil Res*. 2000;44(part 2):147-154.
21. Tsiantis J, Diareme S, Dimitrakaki C, Kolaitis G, Flios A, Christogiorgos S, Weber G, Salvador-Carulla L, Hillery J, Costello H. Care staff awareness training on mental health needs of adults with learning disabilities. *J Learn Disabil*. 2004;8:221-234.
22. Tsiouris JA, Mann R, Patti PJ, Sturmey P. Challenging behaviours should not be considered as depressive equivalents in individuals with intellectual disability. *J Intell Disabil Res*. 2003;47:14-21.
23. Zigman WB, Schupf N, Devenny D, et al. Incidence and prevalence of dementia. *Am J Ment Retard*. 2004;109:126-141.

L. Salvador-Carulla, Professor of Psychiatry, University of Cadiz, Plaza de San Marcos 6, Jerez de la Frontera Cadiz 11403, Spain
E-mail: Luis.salvador@telefonica.net

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The conceptualization of delusions and its implication for understanding and treatment

Stein Opjordsmoen
Section of Clinical Psychopathology, World Psychiatric Association

Introduction

Delusions are among the most frequent symptoms in patients with severe psychiatric disorders. They are not specific, in the meaning that they can occur in different organic and functional mental disorders. Dynamically they can be understood as attempts to escape from tension and anxiety through processes of denial and projection (Cameron, 1963). Thus it may be useful for the individual to develop comforting fictions or beliefs in order to support and secure the personality. This has also been found to be the case in non-clinical life, as delusional thinking and behavior is relatively frequent in the general population (Jones et al, 2003).

Definition

A short but useful definition of the term delusion has been given by Cameron (1963) "A delusion is a fixed belief which persists even though social reality contradicts it." A more comprehensive definition was given in DSM-IV (1994): "A false belief based on incorrect inference about external reality that is firmly sustained despite what almost everyone else believes and despite what constitutes incontrovertible and obvious proof or evidence to the contrary. The belief is not one ordinarily accepted by other members of the persons culture or subculture (eg, it is not an article of religious faith). When a false belief involves a value judgment, it is regarded as a delusion only when the judgment is so extreme as to defy credibility. Delusional conviction occurs on a continuum and can sometimes be inferred from an individual's behavior. It is often difficult to distinguish between a delusion and an overvalued idea (in which case the individual has an unreasonable belief or idea but does not hold it as firmly as is the case with a delusion)."

An important point in the DSM-IV (1994) is to record if delusions are bizarre or not. Delusions are bizarre "if they are

clearly implausible and not understandable and do not derive from ordinary life experiences. An example of a bizarre delusion is a person's belief that a stranger has removed his or her internal organs and has replaced them with someone else's organs without leaving any wounds or scars. An example of a nonbizarre delusion is a person's false belief that he or she is under the surveillance by the police."

The descriptive criteria in DSM-IV (1994) have to be applied in a categorical approach (they are present or not) even though it is mentioned that delusional conviction occurs on a continuum and that it is often difficult to distinguish between a delusion and an overvalued idea.

A dimensional view

Jaspers (1923) held that the characteristics of primary delusions are high subjective certainty and incorrigibility of the content along with total rejection of alternatives. He also found such delusions to be distinctly different from normal beliefs (Jones et al, 2003). Jaspers' categorical view has later been challenged by a dimensional approach. A reason for this is that most clinicians from time to time find it difficult to be certain if a delusion is present or not. Moreover, they have experienced that patients may change over time, beliefs being modified by therapy or without any specific treatments. This was empirically confirmed by Strauss (1969), who examined psychiatric inpatients with a semistructured interview designed to sharply delineate the presence or absence of psychotic symptoms. He found 269 definite delusions and 142 questionable ones, and at follow-up one year later some of the patients who were previously definitely delusional then showed only questionable delusions. Hence, delusions are not always discrete, and persisting phenomena, but better conceptualized as continuous from normal to pathological. Even if delusions can be defined as definite, a natural course of illness might include recovery through phases (Rudden et al, 1982). It is likely that most individuals in the "borderland" on the continuous scale never come to the attention of psychiatrists, but first when the delusions are incapacitating or lead to interpersonal conflicts.

Current empirical evidence suggests that delusions are best conceptualized in multidimensional terms. The characteristics deviate more or less from normal beliefs and behavior on a number of dimensions. The basic abnormality might be that of *affect* regulation, personality, self-esteem, unconscious wishes or escape, perception, judgment, or some combination. The delusion formation then might be a secondary phenomenon (Garety and Hemsley, 1994).

Categorical diagnostic systems have shortcomings that fully have come to the forth in genetic research. Therefore, general dimensional scales for rating mood and psychotic symptoms have been developed (Levinson et al, 2002). In line with a dimensional view of delusions, a number of specific rating scales have been produced; the Dimensions of

Delusional Experience Scale (Kendler et al, 1983), the Personal Ideation Inventory (Rattenbury et al, 1984), the Characteristics of Delusions Rating Scale (Garety and Hemsley, 1987), the Maudsley Assessment of Delusions Schedule (MADS) (Buchanan et al, 1993; Appelbaum et al, 1999), and the Brown Assessment of Beliefs Scale (Eisen et al, 1998). Factor analyses of these scales have revealed the following factors: conviction, delusional construct (organization, bizarreness), preoccupation, subjective distress and behavior.

Dimensional rating scales might be useful for the purpose of defining homogeneous groups of patients as regards clinical presentation, course and outcome. They might represent different etiologies and developments of delusional beliefs, and require specific and different treatments. On the other hand, several studies suggest that there is a continuum as to symptoms from non-patients in the general population to patients with psychotic disorders. This is in line with a continuity model of psychosis (Fanous et al, 2001; Myin-Germeys et al, 2003). Fanous et al (2001) found that positive symptoms in probands with psychosis were associated with positive psychosis-like symptoms in their relatives, suggesting a familial and possibly genetic contribution.

Delusions and nosology

Paranoia is the clinical entity where the clinical picture is dominated by delusions and where the patients have only vague, few or no other symptoms. The nosological status of paranoia, however, has been controversial. The variant of paranoia, as described in DSM-IV (1994), delusional disorder, along with brief psychotic disorder and schizophreniform disorder, seem to have rather doubtful nosological validity (Peralta and Cuesta, 2003). Delusional disorder (DD) has been considered to be a variant of schizophrenia, related to affective illness, a category among obsessive compulsive spectrum disorder, or a distinct nosological entity (Fear et al, 1998). Nevertheless, patients with DD have delusions that are understandable; they are in touch with reality in other areas, but often defend their beliefs with a great deal of engagement.

These delusions have a content which is consistent with incidents that may take place in the real world as judged by healthy people. They are involving situations as being opposed, poisoned, having a disease, or being deceived by one's partner. Patients with DD typically would eagerly defend their delusions and argue even by presenting evidence. In schizophrenia the delusions are often bizarre, have a content which is “impossible”, and the patients have difficulty comprehending why any evidence should be needed at all (Bovet and Parnas, 1993). The presence of bizarre delusions alone satisfies the A criterion for the diagnosis of schizophrenia according to DSM-IV (1994). The concept of bizarre delusions in DSM-IV is based on the first-rank symptoms of Schneider. They include thought broadcasting, thought insertion, thought with-

drawal, and delusions of being controlled. Such symptoms are consistent with disturbances of the ego-boundary. They overlap more or less with concepts as depersonalization, derealization, loss of control, and passivity phenomena (Bovet and Parnas, 1993). Schneider suggested that his first-rank symptoms should be considered as pathognomonic for schizophrenia, but this statement has no support in empirical data. Moreover, if delusions are bizarre or not has been found to be difficult to assess reliably (Fear et al, 1998).

A great deal of evidence suggests that a large group of patients who later develop schizophrenia, in early life has subtle clinical indicators consistent with a vulnerability for the illness. The patients might have had several premorbid manifestations, such as aggressiveness, introversion, difficulties in interpersonal relations, anxiety, eccentricity or formal thought disorder. These characteristics are indicators of a defective attunement between the individual and the outer world. An essential feature for the individuals is the lack of common sense, which in itself is important in order to be able to distinguish between relevant and irrelevant, likely and improbable, and which again is the basis for the ability to distinguish between true and false. The development of delusions in schizophrenia can be understood as the emergence of a new order of being, related to the vulnerability and strengthened by lack of normal social interaction (Bovet and Parnas, 1993).

The term paraphrenia has been defined as lying between paranoia and schizophrenia. Typically patients have hallucinations often in several modalities, well-preserved personality, less likely disorganization and negative symptoms, and the delusions might be understandable, but sometimes fantastic. This concept is also controversial. In clinical practice such patients most often are classified as having either schizophrenia, delusional disorder or paraphrenia (as a separate entity) (Fear et al, 1998).

An alternative to the categorical approach is the multidimensional paradigm. With this approach homogeneous groups of symptoms are studied, and this is likely to be more fruitful in genetic and etiologic research, than studying heterogeneous categories, as they are described in modern classificatory systems. Moreover, multidimensional models seem to have higher predictive value than categorical diagnoses (Peralta and Cuesta, 2003).

Conclusion

Due to shortcomings in the categorical diagnostic systems, the growing interest for a dimensional approach to describe psychopathology is encouraging. The conceptualization of delusions in multidimensional terms has been changed and extended through the production of rating scales. On the basis of new models it will be possible to make further progress in understanding etiologies and how delusional beliefs develop, and subsequently improve treatment options for patients with delusions.

Bibliography

1. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*. Fourth edition, Washington, DC: APA; 1994.
2. Appelbaum PS, Robbins PC, Roth LH . Dimensional approach to delusions: comparison across types and diagnoses. *Am J Psychiatry*. 1999;156:1938-1943.
3. Bovet P, Parnas J. Schizophrenic delusions: a phenomenological approach. *Schizophr Bull*. 1993;19:579-597.
4. Buchanan A, Reed A, Wessely S, Garety P, Taylor P, Grubin D, Dunn G. Acting on delusions, II: the phenomenological correlates of acting on delusions. *Br J Psychiatry*. 1993;163:77-81.
5. Cameron N. Personality development and psychopathology. A dynamic approach. Boston, Mass: Houghton Mifflin; 1963.
6. Eisen JL, Phillips KA, Baer L, Beer DA, Atala KD, Rasmussen SA. The Brown Assessment of Beliefs Scale: reliability and validity. *Am J Psychiatry*. 1998;155:102-108.
7. Fanous A, Gardner C, Walsh D, Kendler KS. Relationship between positive and negative symptoms of schizophrenia and schizotypal symptoms in nonpsychotic relatives. *Arch Gen Psychiatry*. 2001. 58:669-673.
8. Fear CF, McMonagle T, Healy D. Delusional disorders: boundaries of a concept. *Eur Psychiatry*. 1998;13:210-218.
9. Garety PA, Hemsley DR. Delusions. Investigations into the psychology of delusional reasoning. Oxford, UK: Oxford University Press; 1994.
10. Garety PA, Hemsley DR. Characteristics of delusional experience. *Eur Arch Psychiatry Neurol Sci*. 1987;236:294-298.
11. Jaspers K. *Allgemeine Psychopathologie*. Third edition, Berlin, Germany: Springer; 1923.
12. Johns LC, van Os J. The continuity of psychotic experiences in the general population. *Clin Psychol Rev*. 2001;21:1125-1141.
13. Jones H, Delespaul P, van Os J. Jaspers was right after all–delusions are distinct from normal beliefs. *Br J Psychiatry*. 2003;183:285-286.
14. Kendler KS, Glazer WK, Morgenstern H. Dimensions of delusional experience. *Am J Psychiatry*. 1983;40:466-469.
15. Levinson DF, Mowry BJ, Escamilla MA, Faraone V. The Lifetime Dimensions of Psychosis Scale (LDPS): description and interrater reliability. *Schizophr Bull*. 2002;28:683-695.
16. Myin-Germeys I, Krabbendam L, van Os J. Continuity of psychotic symptoms in the community. *Curr Opin Psychiatry*. 2003;16:443-449.
17. Peralta V, Cuesta MJ. The nosology of psychotic disorders: a comparison among competing classification systems. *Schizophr Bull*. 2003;29:413-425.
18. Rattenbury FR, Harrow M, Stoll FJ, Kettering RL. The personal ideation inventory: an interview for assessing major dimensions of delusional thinking. New York, NY: Microfiche Publications; 1984.
19. Rudden M, Gilmore M, Frances A. Delusions: when to confront the facts of life. *Am J Psychiatry*. 1982;139:929-932.
20. Strauss JS. Hallucinations and delusions as points on continua function: rating scale evidence. *Arch Gen Psychiatry*. 1969;21:581-586.

Stein Opjordsmoen, Department of Psychiatry, Ulleval University Hospital, 0407 Oslo, Norway
E-mail: s.e.o.ilner@medisin.uio.no

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New developments and treatment issues in schizophrenia

Wolfgang Gaebel
Section on Schizophrenia, World Psychiatric Association

New developments are to be seen within the context of changing illness and treatment concepts. Illness concepts in schizophrenia in particular have been changing their focus from developmental to degenerative/mixed models, from neurotransmitters and receptors to signal transduction processes, from functional brain systems to molecular biology, from symptoms to functions, from fixed structural deficits to neuroplasticity, and from family genetics to genomics, proteomics, and single nucleotide polymorphisms. In the field of treatment and service in general, stronger consumer orientation has created a trend towards shared treatment decision making, the focus on human rights has evoked worldwide programs and activities of fighting stigma and discrimination, quality orientation has resulted in disease management programs, evidence-based medicine has stimulated guideline development, and cost containment has led to a stronger consideration of cost-effectiveness measures. In schizophrenia in particular, increasing awareness of risk/benefit issues in drug treatment has stimulated the development of novel drugs, a beginning shift in treatment focus from symptom relief to preventive measures has promoted early recognition and intervention research, the increasing interest in protective vs restorative measures has stimulated the evaluation of neuroprotective drugs, a stronger focus on psychosocial treatment has created new psychological interventions, and the general interest in individualizing treatment is promoting pharmacogenetics and pharmacogenomics.

Some of these new developments will be addressed in the following brief review.

Etiopathogenetic models and classification

Genetic findings

A greater understanding of the genetic mechanisms–the identification of several regions that may be susceptibility loci–and the application of pharmacogenetics would lead to new insights into

the pathophysiology of the disorder and to improvements in therapeutic interventions. In a critical review of recently published studies, Berry et al (2003) conclude that "several linkage studies have produced positive results, mostly at a suggestive level, for chromosomal regions 1q, 5p, 5q, 6p, 6q, 8p, 10p, 13q, 15q, and 22q, but in each case there are reports that were either negative or researchers were unable to replicate the original findings. From their own genome-wide scan studies, DeLisi et al, (2002) conclude that "the findings of this large genome-wide scan emphasize the weakness and fragility of linkage reports on schizophrenia. No linkage appears to be consistently replicable across large studies. Thus, it has to be questioned whether the genetic contribution to this disorder is detectable by these strategies."

Candidate gene studies have investigated whether an association between schizophrenia and the genes for various neurotransmitter receptors implicated in the pathogenesis of schizophrenia, eg, dopamine D_2, D_3, D_4, and D_5, serotonin 5-HT_{2A} or NMDA receptors, exists. However, only inconsistent, weak or no evidence of association between the respective receptor genes and schizophrenia has been reported (Berry et al, 2003).

More recent work identified novel candidate regions: neuregulin-1 (chromosome 8p21), dysbindin (chromosome 6p22.3), and proline dehydrogenase (chromosome 22q11), warranting further investigation. Kendler (2004) in consideration of the recent existing developments in the "fourth phase of schizophrenia genetics" emphasizes the evidence for an association between schizophrenia and a set of DNA markers in the dystrobrevin-binding protein-1 gene or dysbindin-1. Two recent postmortem studies have added intriguing information to the role of dysbindin in schizophrenia. In one of the postmortem studies, the presynaptic dysbindin-1 concentration was found to be reduced especially in the hippocampal formation, in the other study the dysbindin mRNA level was found significantly reduced especially in the dorsolateral prefrontal cortex in schizophrenia patients (Kendler 2004). All these new genetic studies provide evidence for promising–although still discordant–results on possible susceptibility genes and the regional distribution of their products. In an excellent review, Harrison and Weinberger (2005) recently discussed the pros and cons of the new putative schizophrenia susceptibility genes. These genetic and neurobiological studies are beginning to yield first insights into the molecular pathways of schizophrenia, mainly converging on synaptic proteins and synaptic functions.

Pharmacogenetics and pharmacogenomics is another focus of research, the goal of which is to select the drug with the greatest likelihood of benefit and the least likelihood of harm in individual patients, based on their genetic make-up. In schizophrenia pharmacogenetics, serotonin and dopamine receptor genes are currently under investigation

(reviewed by Malhotra et al, 2004). Since response and other important clinical phenomena depend on arbitrary definitions, for research purposes the latter have to be made explicit and comparable. Moreover, the fact that pharmacological treatment response is not a stable phenomenon, but may change from episode to episode, needs explanation.

Neurodevelopmental and/or neurodegenerative process?

An open question is whether schizophrenia is simply the final consequence of a cascade of increasing developmental deviance, or whether there is an additional neurodegenerative process following the onset of psychosis which is superimposed on the developmental impairment. The pathogenesis of the disease is hypothesized to be neurodevelopmental in nature based on reports of an excess of adverse events during the pre- and perinatal periods, the presence of cognitive and behavioral signs during childhood and adolescence, and the lack of consistent evidence of a neurodegenerative process in most individuals with schizophrenia. Recent studies of neurodevelopmental mechanisms strongly suggest that no single gene or environmental factor is responsible for driving a highly complex biological process (Lewis and Levitt, 2002). Despite the substantial evidence of the neurodevelopmental theories, there are certain aspects of schizophrenia that are not adequately explained. Among these are the long latency period and the heterogeneous but commonly deteriorating clinical course of the illness. Thus, although there can be little doubt that neurodevelopmental factors play an important role in the diathesis from which schizophrenia arises, other pathophysiologic processes may also be involved. Taken together, recent findings suggest that a combination of genetic and environmental factors, which disturb the course of normal brain development early in life, results in molecular responses that finally lead to the clinical phenotype recognized as schizophrenia (Lewis and Levitt, 2002).

Endophenotypes

Given the high degree of interindividual variability of the clinical symptoms of schizophrenia, an overemphasis of DSM-defined symptom clusters instead of neurobiological parameters has been held responsible for the lack of scientific progress in research on pathophysiology of schizophrenia. In the field of genetic research, the broadening of diagnostic definitions to “spectrum” conditions has rather blurred than sharpened the phenotype and hence has not consistently increased linkage evidence. Instead, the search for endophenotypes as measurable components of the pathway between the genotype and clinical disease has been intensified. By definition, an endophenotype may be a neurobiological, biochemical, neuroanatomical, cognitive, or neurophysiological trait which is heritable, associated with schizophrenia in population, state-dependent, cosegregates with

schizophrenia in affected families, and is found in non-affected family members more frequently than in unaffected families (Gottesman and Gould, 2003). Endophenotypes currently under investigation include sensory motor gating, eye-tracking dysfunction, working memory, and others in schizophrenia. The ultimate research goal would be the development of a diagnostic system based on etiology and pathophysiology (Charney et al, 2002).

New treatment strategies

Accordingly, treatment targets should be more explicitly defined both on the clinical/mind level and the molecular/brain level, response indicators and outcome measures should be specified on various conceptual levels and more systematically applied. Developing new kinds of treatment needs more profound knowledge of etiology and pathophysiology, the accumulation of which needs resources–and time. Meanwhile, we should focus on what is available already today, but could be improved to increase treatment efficacy. For example, applying EBM-derived guidelines, implementing quality measures, intervening in a more coordinated manner–all these improvement strategies could already be applied nowadays. Psychiatrists' guideline adherence in the treatment of schizophrenia is on average around 50%. According to an international survey, development of schizophrenia guidelines most often lacks strategies for their implementation (Gaebel et al, 2005). Studies in the context of the German Research Network on Schizophrenia (GRNS; Wölwer et al, 2003) have demonstrated a positive effect of software-based guideline implementation on treatment processes and outcome (Janssen et al, 2000).

New drug treatments

The introduction of second generation antipsychotics has largely improved the risk/benefit ratio in drug treatment. Most treatment guidelines agree in their recommendation of atypical antipsychotics as first-line treatment at least in first-episode psychosis (Gaebel et al, 2005), but studies in first-episode schizophrenia are still rare (Gaebel et al, 2004). Attention to the metabolic syndrome as a group of adverse symptoms as well as their differential advantage compared to first-generation drugs has recently blurred the picture. Unfortunately, compliance has not that much improved as expected. The introduction of a first atypical long-acting compound (risperidone) has reopened the discussion on the pros and cons of a largely neglected application formula.

A number of new drug developments are currently underway, eg, multireceptor agents (focusing on serotonin receptors, cholinergic mechanisms, and α-adrenoceptors), compounds acting selectively at DA-receptors (selective DA receptor antagonists, DA autoreceptors), and –beyond the DA-hypothesis–neurotensin receptor agonists/antagonists, glutamate receptor agonists, compounds active at the sigma receptors, as well as cannabi-

noid (CB_1) receptor antagonists. Due to NMDA receptor hypofunction in schizophrenia, clinical studies directed at enhancing NMDA receptor function–primarily in chronic schizophrenia and prominent negative symptoms–are currently underway (Coyle and Tsai, 2004).

In developing new drug principles, proximal and distal drug effects are to be differentiated. At present, no drug can claim to improve the whole range of illness-related symptoms and deficits. It is hoped, however, that in the future drug principles will be available which address functions that nowadays improve only secondarily to more basic drug actions.

New psychosocial treatments

Recent results of metaanalyses demonstrate that cognitive behavioral therapy (CBT) produces significant clinical effects on positive and negative symptoms in patients with persisting symptomatology. CBT in acute early schizophrenia, however, seems to have only small and transient additional effects compared to the large effect of routine care (Lewis et al, 2002). In a group of high-risk individuals, CBT (without drug treatment) in comparison to monitoring alone was effective, at least during the active treatment phase, in reducing the transition to psychosis (6% vs 16%) during 6 months.

Another psychological treatment approach is Cognitive Enhancement Therapy (CET). CET is a recovery-phase intervention for symptomatically stable outpatients with reduced relapse risk, who nevertheless frequently remain socially and cognitively disabled. After 2 years of treatment, CET demonstrated significant effects on domains of behavior and cognition (Hogarty et al, 2004).

Yet another aspect of psychosocial intervention is Supportive Therapy (ST) with a focus on impaired social and self-care functioning. Penn et al (2004) suggest that the aspects of ST, such as therapeutic alliance, the provision of support and advice, and efforts to minimize stress, may strengthen the effect of CBT. Approaches to CBT in schizophrenia may be more effective if they place greater emphasis on the interpersonal context and social consequences of symptoms–consistent with recent models of cognitive therapy, which emphasize interpersonal aspects as an important target for treatment (Penn et al, 2004).

Besides the focus on neurocognitive dysfunction, deficient affect regulation is becoming an increasingly important treatment topic. Facial affect recognition as part of that regulatory loop is impaired in all stages of schizophrenia, including early and late prodromal stages, hence qualifying as a trait marker. A recently developed training program of affect recognition in the context of the GRNS (Frommann et al, 2003) has yielded significant effects compared to unspecific psychosocial interventions.

Early intervention and prevention?

Generally, early intervention can be applied in the initial (early or late) prodromal phase (“indicated prevention”),

after the onset of psychosis with the intent to shorten the duration of untreated psychosis (DUP), or in the relapse prodromal phase (secondary prevention). Major aims of an "indicated" preventive approach are improvement of presenting symptomatology, suppression or delay of progression to psychosis, avoidance of cognitive decline and unfavorable social outcome, and reduction of biological and/or psychosocial "toxicity" of DUP. Recent results have demonstrated a significantly lower transition rate into a first episode (9.7%) for those ultra high-risk individuals after a 6-month specific preventive intervention (low-dose risperidone and CBT) compared to needs-based intervention (35.7%). After 12 months, however, this difference was no longer significant (McGorry et al, 2002). In the GRNS, a research group (Bechdolf et al, 2003) is currently focusing on early recognition and intervention both in the early and late prodromal phase.

Valid definition of risk status and identification of predictors for transition to psychosis is still a major task in this research field. Psychopathology alone is either too close to psychosis or too unspecific: positive-like symptoms seem to prevail in the general population in up to 17% (Johns and van Os, 2001). Family history alone is hampered by low prevalence, irregularities in brain imaging data and obstetric complications are either too low in prevalence or too unspecific, whereas neurophysiological and neuropsychological markers seem rather promising. Ethical concerns relating to a broad application of this approach (eg, stigmatization, treatment side-effects) have been widely discussed. It has been claimed by McGorry et al (2002) that this approach at present should be seen in a research context offered to help-seeking people. Accordingly, risk definition, timing and choice of interventions, and risk-benefit issues have to be addressed as research questions.

Action against stigma and discrimination

Stigma, discrimination of patients with schizophrenia and prejudice against schizophrenia are common. Stigma interferes with the detection of the illness, with seek for and adherence to treatment, with rehabilitation and social reintegration. The antistigma program "Open the Doors" of the World Psychiatric Association, currently being implemented in 26 countries, is aimed at reducing the stigma attached to, and the discrimination against schizophrenia. Since 1999 the program has also been implemented in Germany, partly in the context of the GRNS (Gaebel and Baumann, 2003). Recent results from public surveys have clearly demonstrated the program's positive effect on social distance and other indicators of stigmatization. Systematic information, contact, or protest are the effective ingredients of programs–aiming at the public or specific target groups–to improve knowledge and overcome prejudice and negative attitudes against schizophrenia and those who suffer from it.

Summary and conclusions

Several new putative schizophrenia susceptibility genes have been identified and are currently being studied intensively. Genetic and neurobiologic studies are beginning to yield first insights into molecular pathways leading to schizophrenia susceptibility. Endophenotypes are under intense investigation searching for easily measurable neurobiological correlates of the underlying disease process. Hopefully, this research will lead to therapeutic implications. Treatment options in schizophrenia today range from prevention to maintenance strategies. However, their systematic implementation could be improved and should be encouraged by means of quality management techniques. Patient participation in treatment decisions is now given more attention. With evolving new and refining old treatments, knowledge on illness and treatment mechanisms is also accumulating. Biological and psychosocial interventions are complementary, their respective actions can best be understood from a multilevel perspective. All treatments are offered in specific care settings. The future development of schizophrenia care settings should–irrespective of increasing economic restrictions–guarantee the availability of the full treatment spectrum to all patients.

Bibliography

1. Bechdolf A, Wagner M, Kühn KU, Streit M, Bottländer R, Wieneke A, Schulze-Lutter F, Maier W, Klosterkötter J, Ruhrmann S. Interventions in the initial prodromal phase of the psychosis in Germany: concept and first results. *Br J Psychiatry*. 2003. In press.
2. Berry N, Jobanputra V, Pal H. Molecular genetics of schizophrenia: a critical review. *J Psychiatry Neurosci*. 2003;28:415-429.
3. Coyle J, Tsai G. The NMDA receptor glycine modulatory site: a therapeutic target for improving cognition and reducing negative symptoms in schizophrenia. *Psychopharmacology*. 2004;174:32-38.
4. DeLisi L, Shaw SH, Crow TJ, Shields G, Smith A, Larach N, Wellman N, Loftus J, Nanthakumar B, Razi K, Stwart J, Comazzi M, Heffner T, Sherrington R. A genome-wide scan for linkage to chromosomal regions in 382 sibling pairs with schizophrenia or schizoaffective disorder. *Am J Psychiatry*. 2002;159:803-812.
5. Frommann N, Streit M, Wölwer W. Remediation of facial affect recognition impairments in patients with schizophrenia: a new training program. *Psychiatry Res*. 2003;117:281-284.
6. Gaebel W, Weinmann S, Sartorius N, Rutz W, McIntyre JS. Schizophrenia Practice Guidelines–An International Survey and Comparison. *Br J Psychiatry*. 2005. In press.
7. Gaebel W, Moller HJ, Buchkremer G, Ohmann C, Riesbeck M, Wolwer W, Von Wilmsdorff M, Bottlender R, Klingberg S. Pharmacological long-term treatment strategies in first episode schizophrenia–study design and preliminary results of an ongoing RCT within the German Research Network on Schizophrenia. *Eur Arch Psychiatry Clin Neurosci*. 2004;254:129-140.
8. Gaebel W, Baumann AE. Interventions to reduce the stigma associated with severe mental illness: experiences from the Open the Doors program in Germany. *Can J Psychiatry*. 2003;48:657-662.

9. Gottesman II, Gould. The endophenotype concept in psychiatry: etymology and strategic intentions. *Am J Psychiatry*. 2003;160:636-645.
10. Harrison PJ, Weinberger DR. Schizophrenia genes, gene expression, and neuropathology: on the matter of their convergence. *Mol Psychiatr*. 2005;10:40-68.
11. Hogarty GE, Flesher S, Ulrich R, Carter M, Greenwald D, Pogue-Geile M, Kechavan M, Cooley S, DiBarry AL, Garrett A, Parepally H, Zoretich R. Cognitive enhancement therapy for schizophrenia: effects of a 2-year randomized trial on cognition and behavior. *Arch Gen Psychiatry*. 2004;61:866-876.
12. Janssen B, Burgmann C, Habel U, Held T, Hoff P, Jänner M, Mecklenburg H, Prüter C, Ruth A, Saß H, Schneider F, Gaebel W. Externe Qualitätssicherung der stationären Behandlung schizophrener Patienten. Ergebnisse einermultizentrischen Studie. *Nervenarzt.* 2000;71:364-372.
13. Johns LC, van Os J. The continuity of psychotic experiences in the general population. *Clin Psychol Rev*. 2001;21:1125-1141.
14. Kendler KS. Schizophrenia Genetics and Dysbindin: A Corner Turned? *Am J Psychiatry*. 2004;161:1533-1536.
15. Lewis DA, Levitt P. Schizophrenia as a disorder of neurodevelopment. *Annu Rev Neurosci*. 2002;25:409-432.
16. Lewis S, Tarrier N, Haddock G, Bentall R, Kinderman P, Kingdon D, Siddle R, Drake R, Everitt J, Leadley K, Benn A, Grazebrook K, Haley C, Akhtar S, Davies L, Palmer S, Faragher B, Dunn G. Randomised controlled trial of cognitive-behavioural therapy in early schizophrenia: acute-phase outcomes. *Br J Psychiatry*. 2002;43(suppl):91-97.
17. Malhotra AK, Murphy Jr GM, Kennedy JL. Pharmacogenetics of psychotropic drug response. *Am J Psychiatry*. 2004;161:780-796.
18. McGorry PD, Yung AR, Phillips LJ, Yuen HP, Francey S, Cosgrave EM, Germano D, Bravin J, McDonald T, Blair A, Adlard S, Jackson H. Randomized controlled trial of interventions designed to reduce the risk of progression to first-episode psychosis in a clinical sample with subthreshold symptoms. *Arch Gen Psychiatry*. 2002;59:921-928.
19. Penn DL, Mueser KT, Tarrier N, Gloege A, Cather C, Serrano D, Otto MW. Supportive therapy for schizophrenia: possible mechanisms and implications for adjunctive psychosocial treatments. *Schizophr Bull*. 2004;30:101-112.
20. Wölwer W, Buchkremer G, Häfner H, Klosterkötter J, Maier W, Möller HJ, Gaebel W. German research network on schizophrenia–bridging the gap between research and care. *Eur Arch Psychiatry Clin Neurosci*. 2003;253:321-329.

Wolfgang Gaebel, Professor of Psychiatry, Chair, Section on Schizophrenia, Department of Psychiatry, Heinrich-Heine-University Düsseldorf, Rheineland State Clinics Düsseldorf, Bergische Landstr. 2, D-40629 Düsseldorf, Germany
E-mail: wolfgang.gaebel@uni-duesseldorf.de

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Recent developments in eating disorders

Katherine Halmi
Section of Eating Disorders, World Psychiatric Association

Introduction

The term "eating disorder" usually refers to anorexia nervosa (AN) or bulimia nervosa (BN) or variants thereof. These disorders are complex syndromes involving the interaction of environmental, psychological, and physiological factors. In the past few years with the recognition that the disordered eating occurs across many cultural esthetics and societal systems, there has been a resurgence of investigations of the neurobiology of eating disorders. Evidence-based treatment has also been emphasized in recent research with randomized controlled trials of both psychotherapy and pharmacotherapy for treating anorexia nervosa, bulimia nervosa and binge eating disorder (BED).

Neurobiological investigations

Genetic research

Both case control association and linkage studies have been conducted in the molecular genetic study of eating disorders. Serotonergic genes were studied most frequently with contradictory findings. Positive association studies for the receptor 5-HT_{2A} was found for both AN and BN in one study (Ricca et al, 2002) and negative findings were present for these two disorders by Nishiguchi et al, (2001); Gorwood et al, (2002). Controversial findings were also present for *HTR2C* with positive findings for AN (Hsu et al, 2003; Westburg et al, 2002) and negative findings by Karwautz et al (2001) for AN. Positive findings have emerged for the serotonin transporter gene (D'bella et al, 2000; Fumeron et al, 2001) and negative findings for this transporter gene in studies by Sundaramurthy (2000) and Urwin et al (2003) for AN. A positive association with AN and catechol-*O*-methyl transferase was found but not yet replicated (Frisch et al, 2001). Erwin et al (2002) found a positive association between AN restricting subtype and a polymorphism in the promoter region of the norepinephrine transporter gene (NET). A gene-gene interaction effect between monoamine oxidase A gene (*L* allele) and the NET gene *pPR-L4*

homozygosis was found to be associated with the restricting subtype of AN (Erwin et al, 2003). Positive findings but not yet replicated were found for agouti-related protein (Vink et al, 2001) and negative findings were present for uncoupling proteins (Hu et al, 2002) in AN. Finally, there is positive but not yet replicated evidence that the potassium channel gene (Koronyo - Hamaoui et al, 2002) and the brain-derived neurotrophic factor (Ribases et al, 2003) may contribute to the genetic susceptibility to AN with positive association studies.

The first linkage study of AN of 192 families with at least one affected relative pair with AN and related eating disorders was a multisite, multinational collaborative effort. Limiting the linkage analysis to the restricting subtype yielded evidence for the presence of a susceptibility locus on chromosome 1 (Grice et al, 2002). A linkage study of bulimia nervosa reported significant linkage on chromosome 10p (Bulik et al, 2003). Devlin et al (2002) found for the selected behavioral covariates of drive for thinness and obsessionality there was a significant linkage on chromosomes 1, 2, and 13.

Hypothalamic neuropeptides

Melanocortins interact with leptin and serotonin in the suppression of eating behavior. The severity of binge eating in obese patients has been associated with mutations in the melanocortin #4 receptor gene (Farooqi et al, 2003; Branson et al, 2003). Another study found that some patients with AN and BN had circulating autoantibodies that bind to alpha-melanocyte–stimulating hormone or adrenocorticotrophic hormone (Fetissov et al, 2002). It should be noted that agouti-related protein acts as an antagonist of central melanocortin receptors. And finally, three studies have verified elevated plasma levels of the adipokine adiponectin in anorexia nervosa (Pannacciulli et al, 2003; Delpote et al, 2003; Iwahashi et al, 2003).

Plasma ghrelin levels are significantly higher in patients with AN compared with age–matched healthy volunteers (Otto et al 2001; Shiiay et al, 2002; Tanaka et al, 2003). As patients regain weight their ghrelin levels decrease toward normal values.

Leptin plasma levels in AN are low and return to normal with weight gain and nutritional rehabilitation (Monteleone et al, 2000). For BN leptin secretion is related to the chronicity in severity of binge/purge behavior (Monteleone et al, 2002). The authors hypothesize that leptin production is not directly involved in the etiology of AN and BN but may have an impact on the course and prognosis of these disorders. The reason for their hypothesis is that leptin acts as a hunger suppressant factor, a modulator of reproduction, physical activity, immune system and other endocrine functions.

Neuroimaging studies in eating disorders

Studies assessing resting brain activity in AN have mostly used SPECT, single photon emission computer tomography.

These studies suggest alterations of the temporal, parietal, or cingulate cortex during the ill state with most often recovery after weight gain (Takano et al, 2001; Rastam et al, 2001). The authors hypothesize that increased anxiety in AN could be related to altered amygdala function since the mesial temporal cortex is implicated in emotional processing. fMRI studies using visual stimuli of food or body image in AN have suggested involvement of prefrontal, anterior cingulate cortex and parietal cortex (Seagar et al, 2002; Wagner et al, 2003). Receptor imaging studies in AN show reduced 5-HT_{2A} receptor binding occurring in the underweight state and persisting after recovery (Frank et al, 2002; Bailer et al, 2004). BN subjects have shown a reduced 5-HT_{2A} receptor activity when recovered and reduced 5-HT transporter binding when ill. They also have shown increased 5-HT_{1A} receptor binding during the ill state (Kaye et al, 2001; Tiihonen et al, 2004).

The research described above is laying the foundation for understanding the biological bases of eating disorders which is essential for developing effective treatments for these disorders. All of the references cited above can be found in *CNS Spectrums*, July, 2004.

Evidence-based treatment

Three major reviews of new treatment research in eating disorders with critical analyses were published this year. These include the Cochran Reviews (2004), Practice Guidelines of Anorexia Nervosa (Australian and New Zealand Clinical Practice Guidelines, 2004) and The NICE Guidelines For The Treatment of Eating Disorders (National Institute For Clinical Excellence, 2004).

Psychosocial interventions–randomized controlled trials

For individual psychosocial interventions for anorexia nervosa there continues to be difficulty in recruiting for randomized controlled studies and retaining patients in these studies. At least a one-third dropout rate or withdrawal due to relapse complicates the interpretation of these randomly controlled trials. There is some indication that cognitive-behavioral therapy (CBT) following weight gain may reduce the risk of relapse (McDermott et al, 2004; Pike et al, 2003).

Family therapy is the most effective treatment for adolescents with anorexia nervosa and seems to be equally effective when administered as conjoint or as separated family therapy (Eisler et al, 2000). The study by Lock et al (2004) showed that 6 months of therapy seemed to be as effective as 12 months. However, the authors stated patients with severe OCD may require longer treatment.

Medications are only useful adjuncts in treating anorexia nervosa. A study by Kaye et al (2001) showed that fluoxetine during weight maintenance after weight restoration may decrease the relapse rate in anorexia nervosa.

In contrast to anorexia nervosa, treatment studies of bulimia nervosa have proliferated in the past 15 years. Most recently self-help manuals have been

developed for the treatment of bulimia nervosa. Various studies comparing self-help manuals to fluoxetine or CBT have shown limited effectiveness of the self-help approach (Walsh et al, 2004; Mitchell et al, 2001). In a study by Safer et al (2001) dialectical behavior therapy was found to be superior to a waiting list in the treatment of bulimia nervosa.

Recent pharmacotherapy randomized double-blinded placebo controlled trials have shown topiramate to be effective in reducing binge/purge behavior both in bulimia nervosa and binge eating disorder patients (Hoopes et al, 2003; McElroy et al, 2003).

At the present time the treatment of bulimia nervosa can be best summarized by stating binge eating, purging, and core eating disorder attitudes respond best to cognitive-behavioral therapy. A greater improvement in mood and anxiety occurs when antidepressant therapy is added to CBT. Patients with binge eating disorder have responded well to CBT and antidepressants that have been effective in treating bulimia nervosa.

Bibliography

1. Australian and New Zealand Clinical Practice Guidelines for Treatment of AN. *Aust N Z J Psychiatry*. 2004;38:659-670.
2. Cochran Reviews. The Cochran Library, issue 3. 2004.
3. Neurobiology of eating disorders. *CNS Spectrums*. 2004;9(7).
4. Eisler I, Dare C, Hodes M, et al. Family therapy for adolescent anorexia nervosa: the results of a controlled comparison of two family interventions. *J Child Psychol Psychiatry*. 2000;41:727-736.
5. Hoopes SP, Reimherr FW, Hedges DW, et al. Treatment of bulimia nervosa with topiramate in a randomized, double-blind, placebo-controlled trial. *J Clin Psychiatry*. 2003;64:1335-1341.
6. Kaye WH, Nagata T, Weltzin TE, et al. Double-blind placebo-controlled administration of fluoxetine in restricting and restricting purging type anorexia nervosa. *Biol Psychiatry*. 2001;7:644-652.
7. Lock J, LaGrange D, Agras S. Short term vs long term family therapy of anorexia nervosa. Presented at the Eating Disorder Research Society Meeting, Amsterdam, Netherlands, October 2, 2004.
8. McDermott C, Agras WS, Crow SJ, et al. Participant recruitment for an anorexia nervosa treatment study. *Int J Eating Disord*. 2004;35:33-41.
9. McElroy SL, Arnold LM, Shapira NA et al. Topiramate in the treatment of binge eating disorder associated with obesity: a randomized, placebo-controlled trial. *Am J Psychiatry*. 2003;160:255-261.
10. Mitchell JE, Fletsher L, Hanson K, et al. The relative efficacy of fluoxetine and manual-based self-help in the treatment of outpatients with bulimia nervosa. *J Clin Psychopharmacol*. 2001;21:298-304.
11. NICE Clinical Guidelines For Eating Disorders. *National Institute for Clinical Excellence–Clinical Guideline Number 9.* January, 2004.

12. Pike KM, Walsh BT, Vitousek K. Cognitive behavior therapy in the post hospitalization treatment of anorexia nervosa. *Am J Psychiatry*. 2003;160:2046-2049.
13. Safer DL, Telch CF, Agras WS. Dialectical behavior therapy for bulimia nervosa. *Am J Psychiatry*. 2001;158:632-634.
14. Walsh BT, Fairburn CG, Mickley D, et al. Treatment of bulimia nervosa in a primary care setting. *Am J Psychiatry*. 2004;161:556-561.

Katherine Halmi, Professor of Psychiatry, Weill Medical College of Cornell University, Director, Eating Disorders Program, New York Presbyterian Hospital - Westchester Division, 21 Bloomingdale road, White Plains, NY 10605, USA
E-mail: kah29@cornell.edu

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Psychiatric concomitants of cancer, screening procedures, and training of health care professionals in oncology: the paradigms of psycho-oncology in the psychiatry field

L. Grassi, J. C. Holland, C. Johansen, U. Koch , F. Fawzy
Section on Psycho-oncology, World Psychiatric Association

Introduction

Psycho-oncology, as a subspecialty deals with the psychosocial, behavioral, spiritual, and existential dimensions of patients with cancer and their families. Over the past quarter century, psycho-oncology has contributed integrative principles in cancer care (Holland, 2002). As it has been recently shown for the subspecialty of psychosomatic medicine (Gitlin et al, 2004), psycho-oncology has also been recognized as a subspecialty of oncology for the impact it has had at clinical, educational and research levels. Several studies have shown that psychological factors such as stress, personality traits and grief do not increase the risk for cancer (Oksbjerg et al, 2002; Schapiro et al, 2002; Ross et al, 2003; Dalton et al, 2004). This important observation has changed the aspects of the clinical psychosocial research and most recent advances in psycho-oncology have been in clinical areas, such as psychosocial aspects of cancer prevention and screening, assessment of psychiatric and psychological disorders following diagnosis and treatment, family implications of cancer, cancer survivorship, and palliative care (Holland, 2003).

In this article we will consider four key areas drawing much current attention: 1) the evaluation of psychiatric morbidity and its consequences in cancer patients; 2) the development and application of psychological screening guidelines; 3) the role of education and training among cancer physicians; and 4) the impact of evidence-based psychosocial treatment in cancer care.

Psychosocial morbidity in cancer and its consequences

It is well known that the diagnosis and treatment of cancer is accompanied by significant psychological consequences, resulting in emotional stress symptoms (suffering of mind and spirit) and in the development of emotional disorders among cancer patients. In fact, over the last twenty years, several studies have shown that psychosocial morbidity, especially depressive disorders and anxiety, affect 30-40% of cancer patients *(Table I)*. A further 25-30% present psychosocial conditions (eg, health anxiety, irritable mood, demoralization) which are not identified through the current nosology (ie, DSM-IV or ICD-10) and which should be a focus of clinical attention and intervention (Grassi et al, 2005).

The need for regularly assessing psychosocial concomitants of cancer derives from the impact of the illness in patients and their families, as summarized in *Table II*. Psychiatric morbidity has been shown to increase length of stay in the hospital, favor maladaptive coping and abnormal illness behavior, reduce quality of life, decrease adherence to treatment, negatively influence the response to primary chemotherapy, increase the risk of suicide, and, in some studies, the risk of recurrence and death. Psychosocial problems reverberate also within the family, increasing the emotional distress among caregivers and, in the case of a patient's death, risking a greater chance of complicated or traumatic grief *(Table II)*.

Several phases of the illness trajectory can trigger emotional distress, such as

Table I. Prevalence of psychiatric disorders in cancer patients

Authors	**Setting**	**Country**	**Prevalence**
Derogatis et al, *JAMA*. 1983;249:751-757	215 outpatients	USA	47% DSM-III
Grassi et al, *Psycho-Oncology*. 1993;2:11-20	157 outpatients	Italy	DSM-III-R
Razavi et al, *Br J Psychiatry*. 1990;156:79-83	128 inpatients	Belgium	62% DSM-III-R
Minagawa et al, *Cancer*. 1996;78:1131-1137	93 terminally ill patients	Japan	53.7% DSM-III-R
Morasso et al, *Oncology*. 1996;53:295-302	107 outpatients	Italy	62% ICD-10
Kissane et al, *Med J Aust*. 1998;169:192-196	303 outpatients	Australia	49% DSM-IV
Prieto et al, *J Clin Oncol*. 2002;20:1907-1917	220 hematologic inpatients	Spain	44.1% DSM-IV

finding a suspicious symptom, hearing the diagnosis, awaiting treatment, change or end of treatment, discharge from hospital, surviving cancer, treatment failure, recurrence or progression, advanced phase of illness, and end of life. In spite of efforts to sensitize oncologists and health care professionals to recognize, assess and refer distressed patients, problems are still evident. 30-40% of patients needing psychosocial intervention are going undiagnosed and untreated *(Table III)*. Referrals to psycho-oncology services remain low (Grassi et al, 2000).

Some signs of improvement are becoming apparent, however. Guidelines for the management of distress have been established and are being disseminated. Also, training models aimed at improving doctors' communications skills are facilitating the recognition and treatment of psychosocial problems and psychiatric disorders of cancer patients.

Table II. Main consequences of psychosocial morbidity in cancer patients

- Increased length of stay in the hospital (Prieto et al. *J Clin Oncol*. 2002;20:1907-1917)
- Maladaptive coping and abnormal illness behavior (Grassi et al. *Psycho-Oncology*. 1993;2:11-20)
- Reduced compliance to treatment (Diamate et al. *Arch Intern Med*. 2000;160:2101-2117)
- Increased risk of suicide (Henrikkson et al. *J Affect Disord*. 1995;36:11-20; Hem et al. *J Clin Oncol*. 2004;22:4209-4216)
- Reduced efficacy of chemotherapy (Walker et al. *Eur J Cancer*. 1999;35:1783-1788)
- Reduced quality of life (Parker et al. *Psycho-Oncology*. 2003;12:183-193)
- Increased risk of recurrence and death (Watson et al. *Lancet*. 1999;354:1331-1336)
- Increased psychosocial morbidity in the family
- Complicated grief in the family

Table III. Under-recognition of distress in patients with cancer

Authors	Setting	Country	Recognition
Passik et al. *J Clin Oncol*. 1998;16:1594-1600	1109 patients 12 doctors	USA	79% mild depression 33% moderate depression 13% severe depression
Söllner et al. *Br J Cancer*. 2001;84:179-185	298 patients 8 doctors	Austria	33% distress
Fallowfield et al. *Br J Cancer*. 2001;84:1011-1015	2297 patients 143 doctors	UK	28.8% sensitivity 34.7% misclassification
Keller et al. *Ann Oncol*. 2004;15:1243-1249	189 patients	Germany	39-40% misclassification

Standards and clinical practice guidelines for management of distress in cancer

In 1997, the National Comprehensive Cancer Network (NCCN) (www.nccn.org) in the United States developed the first set of clinical practice standards and guidelines for the management of psychosocial distress. Updates have been made almost every year since 1997 with the last edition issued in 2005. A multidisciplinary panel, consisting of 23 professionals (eg, psychiatry, oncology, psychology, social work, nursing, clergy), worked with a patient representative to create an instrument to routinely and rapidly assess psychosocial morbidity and provide clinicians with practical guidelines for psychosocial care (Holland, 1999; Holland, 2000; Holland et al, 2003). In order to avoid the stigmatizing terms of "psychiatric," or "psychosocial," the panel chose the word "distress", which is defined as "a multifactorial unpleasant emotional experience of a psychological (cognitive, behavioral, emotional), social, and/or spiritual nature that may interfere with the ability to cope effectively with cancer, its physical symptoms and its treatment.

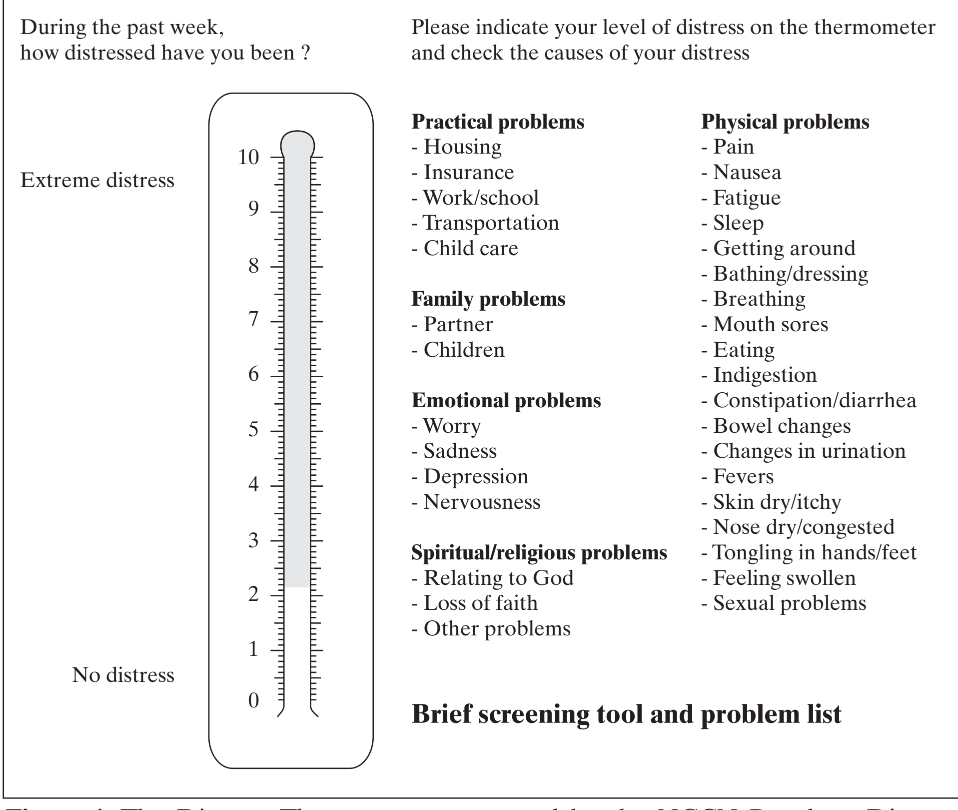


Figure 1. The Distress Thermometer proposed by the NCCN Panel on Distress Management in oncology

Distress extends along a continuum, ranging from common normal feelings of vulnerability, sadness, and fears to problems that can become disabling, such as depression, anxiety, panic, social isolation, and existential and spiritual crisis" (Holland, 1999).

The Distress Thermometer has shown to be a valid tool when compared to psychometric instruments such as the Hospital Anxiety and Depression Scale (HADS) and the Brief Symptom Inventory (BSI). Clinical practice guidelines for the management of psychosocial distress are presently at different stages of development in Australia, Germany, England, Hungary, Italy, Israel, Spain, United States, Canada. On the basis of these countries' experiences, it has been suggested that distress be added as the sixth "vital sign" after pain in order to raise the level of attention to this need during clinic visits (Holland et al, 2004).

While the clinical practice guidelines are slow to disseminate and effect change in practice patterns, they serve as "benchmarks" by which the quality of psychosocial care can be measured. However, in Canada, standards and guidelines have been used since 1999 ("National Psychosocial Oncology Standards for Canada") to guide the provincial and federal governments in planning and budgeting for psychosocial care in cancer (Canadian Association of Psychosocial Oncology, 1999; www.capo.ca). A more recent step forward in psycho-oncology has been taken in Australia with the publication of a comprehensive clinical guideline handbook "Clinical Practice Guidelines for the Psychosocial Care of Adults with Cancer" by the National Breast Cancer Centre and National Cancer Control Initiative (downloadable at www.nhmrc.gov.au and linked to the UICC website www.uicc.org) which has favored the application of new psychosocial paradigms in oncology.

Training in communication skills

Psycho-oncology has helped advance the care of patients through efforts to train oncologists in doctor-patient communication skills. Recent research has shown that communication skills can be taught and that education and training of oncologists, particularly through peer-led workshops have a strong positive impact in clinical care. Over the last few years, a number of well-conducted RCTs in communication skills training have demonstrated that communication skills are associated with increased physicians' awareness and appreciation of psychosocial issues and improvement in their communication skills with patients. Of critical importance, it is now recognized that the physician's ability to communicate and relate to their patients facilitates the early detection of emotional problems and early referral, and helps prevent possible psychological complications. Good patient-centered communication has been also reported as having positive outcomes on various cancer patient measures, such as compliance with medical treatments, symptom resolution, pain control, adjustment to illness and patient's satis-

faction (Maguire, 1999; Fallowfield and Jenkins, 2004). Lastly, training in communication can both improve physician confidence in their skills and decrease the level of psychosocial morbidity (burnout) (Armstrong and Holland, 2004).

Evidenced-based psychosocial intervention

A further recent development regards the new standards for psychosocial intervention in cancer. Unlike 30 years ago, when psychotherapy was not considered as scientific as other medical interventions, new data have provided evidence of the impact of psychological and psychosocial approaches in cancer (Fawzy et al, 1995). Psychological interventions, such as educational, coping and emotional support, and psychotherapy sensu stricto have shown to be of help in several studies. Fawzy (1999), discussing the rationale for psychosocial intervention in cancer care, points out that the diagnosis of cancer and consequent medical treatment determine psychological distress and emotional turmoil that can be specifically managed with psychosocial intervention. However, the choice of intervention is related to several variables, especially the phase of illness. Thus, interventions will vary depending if the patient is in the diagnostic phase, in the initial treatment phase, in follow-up, or has had recurrence and re-treatment, or in the palliative phase. Demographic and clinical variables (eg, type of cancer, age, gender) should also be considered in deciding the best psychosocial intervention in the context of cancer. The level of psychological distress is also important, since it has been shown that patients with the more intense symptoms seek psychosocial support compared with patients who have social support in their interpersonal lives (Plass and Koch, 2001). This underscores the usefulness of proper psychosocial screening and evaluation guidelines as a way to refer patients in need of help to proper psycho-oncology services. Group therapy has also been examined as an evidence-based intervention with a good cost-benefit ratio, in comparison with individual psychological therapy (Fawzy, 1998). However, more research is needed to address some unresolved problems regarding the specific effects of psychotherapy in cancer patients. While the impact of psychosocial intervention in improving survival is not confirmed (Ross et al, 2002), the effects on well-being, anxiety and depression are clear (Sheard and Maguire, 1999). As recently suggested by Newell et al, (2002) the challenge for the future is to improve the quality of studies on efficacy of psychotherapy in order to make more specific the type of intervention for distinct psychological disorders or problems.

Conclusion

In conclusion, psycho-oncology has been a rapidly progressing subspecialty over the recent past. Results of research in psychological screening, education and psychosocial interventions strongly support that view. The NCCN panel advises that further advancements in the immediate future depend on: establishing institu-

tional multidisciplinary committees for implementation of standards and guidelines; conducting multicenter trials that explore brief screening instruments and treatment guidelines; requiring institutions to continuously monitor quality improvement in the psychosocial care of their patients as a priority; and developing educational approaches to distress management for staff, patients, and families.

Bibliography

1. Armstrong J, Holland, J. Surviving the stresses of clinical oncology by improving communication. *Oncology*. 2004;18:363-368.
2. Dalton SO, Laursen TM, Mellemkjaer L, Johansen C, Mortensen PB. Risk for cancer in parents of patients with schizophrenia. *Am J Psychiatry*. 2004;161:903-908.
3. Fallowfield L, Jenkins, V. Communicating sad, bad, and difficult news in medicine. *Lancet*. 2004;363:312-319.
4. Fawzy FI, Fawzy NW. Group therapy in the cancer setting. *J Psychosomat Res*. 1998;45:191-200.
5. Fawzy FI. Psychosocial interventions for patients with cancer: what works and what doesn't. *Eur J Cancer*. 1999;35:1559-1564.
6. Fawzy FI, Fawzy NW, Arndt LA, Pasnau RO. Critical review of psychosocial interventions in cancer care. *Arch Gen Psychiatry*. 1995;52:100-113.
7. Gitlin DF, Levenson JL, Lyketsos CG. Psychosomatic medicine: a new psychiatric subspecialty. *Acad Psychiatry*. 2004;28:4-11.
8. Grassi L, Gritti P, Rigatelli M, Gala C. Psychosocial problems secondary to cancer: an Italian multicenter survey of consultation-liaison psychiatry in oncology. *Eur J Cancer*. 2000;36:579-585.
9. Grassi L, Sabato S, Rossi E, Biancosino B, Marmai L. The use of the Diagnostic Criteria for Psychosomatic Research (DCPR) in oncology. *Psychother Psychosomat*. 2005;74:100-107.
10. Holland J. An algorithm for rapid assessment and referral of distressed patients. In Perry CM, ed. *American Society of Clinical Oncology Educational Book*. Alexandria: 2000:129-138.
11. Holland J, Sepulveda C, Zabora J, et al. Psychosocial distress–the 6th vital sign: from identification to intervention. *Psycho-Oncology*. 2004;13:S56.
12. Holland JC. American Cancer Society Award lecture. Psychological care of patients: psycho-oncology's contribution. *J Clin Oncol*. 2003;(23 suppl):253s-265s.
13. Holland JC. NCCN practice guidelines for the management of psychosocial distress. *Oncology*. 1999;13:113-147.
14. Holland JC, Andersen B, et al. NCCN (1.2003). Distress Management Clinical Practice Guidelines in Oncology. *J Nat Comprehensive Cancer Network*. 2003;1:344-374.
15. Holland JC. History of Psycho-oncology: overcoming attitudinal and conceptual barriers. *Psychosomat Med*. 2002;64:206-221.
16. Maguire P. Improving communication with cancer patients. *Eur J Cancer*. 1999;35:1415-1422.
17. Newell SA, Sanson-Fisher RW, Savolainen NJ. Systematic review of psychological therapies for cancer patients: overview and recommendations for future research. *J Nat Cancer Institute*. 2002;94:558-584.

18. Oksbjerg Dalton S, Boesen EH, Ross L, Schapiro I, Johansen C. Mind and cancer–do psychological factors cause cancer? *Eur J Cancer*. 2002;38:1313-1323.
19. Plass A, Koch U. Participation of oncological outpatients in psychosocial support. *Psycho-Oncology*. 2001;10:511-520.
20. Ross L, Boesen EH, Dalton SO, Johansen C. Mind and cancer: does psychosocial intervention improve survival and psychological well-being? *Eur J Cancer*. 2002;38:1447-1457.
21. Ross L, Johansen C, Oksbjerg Dalton S, Mellemkjær L, Thomassen LH, Mortensen PB, Olsen JH. Psychiatric hospitalizations among survivors of cancer during childhood or adolescence. *N Engl J Med*. 2003;349:650-657.
22. Schapiro IR, Nielsen LF, Jorgensen T, Boesen EH, Johansen C. Psychic vulnerability and the associated risk for cancer. *Cancer*. 2002;94:3299-3306.
23. Sheard T, Maguire P. The effect of psychological interventions on anxiety and depression in cancer patients: results of two meta-analyses. *Br J Cancer*. 1999;80:1770-1780.

Luigi Grassi, Professor of Psychiatry, University of Ferrara, Corso Giovecca 203, 44100 Ferrara, Italy
E-mail: luigi.grassi@unife.it

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New developments in personality disorder research

Erik Simonsen, Peter Tyrer
Section on Personality Disorders, World Psychiatric Association

In a previous article we summarized the status of, and challenges in, the field of personality disorders (Tyrer and Simonsen, 2003). This subject continues to attract great interest at present and some recent developments illustrate this.

Classification

Areas of development: DSM and ICD under siege

The ICD-10 and DSM-IV personality disorder classifications have been in use since 1992 and 1994 respectively and are to be revised within the next 5 or 6 years, probably nearing the end of their useful life. Of the conditions within the group, schizotypal, borderline and antisocial (dissocial) personality disorders continue to attract the most attention and seem likely to be maintained in some form in any revised classification. Schizotypal personality disorder and schizotypy seems to be a mixture of trait and state features. It has a clear familial and neurobiological relationship to schizophrenia spectrum disorders and should, according to the classification in ICD-10, belong to that group. Emotionally unstable personality disorders (including borderline personality disorder) are a heterogeneous group with elements of mood disorder, identity difficulty, impulsivity, interpersonal problems and psychotic ideation within its ambit and it needs better definition. Despite this, there is now considered to be sufficient evidence of treatment effectiveness to bring out practice guidelines (APA, 2001) and this has stimulated great interest. Antisocial and dissocial personality disorder remains a major public health problem and in some countries attempts are being made to bring it more under the responsibility of psychiatric services. This has been most marked in England and Wales, where a new diagnosis, "dangerous and severe personality disorder (DSPD)" briefly emerged in 1999, only to be criticized with some force (Moran, 2002) and now replaced by the term "DSPD programme" with less emphasis on the diagnostic status of the condition.

A major problem continues to be the lack of agreement over what is being measured in both normal and abnormal personality, excessive co-occurrence, heterogeneity among persons with same diagnosis and inadequate coverage of maladaptive personality functioning. And when a comparison of personality scales reveals that up to 57% of variance in personality disorder diagnosis can be explained by interscale differences (Trobst et al, 2004), it is not surprising that there is little confidence in the use of these instruments for diagnostic purposes.

There is likely to be a fundamental change to the classification system in the near future. Alternative dimensional models are under consideration for their validity and utility in future classification (Widiger and Simonsen, 2005). In December 2004 a conference was cosponsored by the American Psychiatric Association, the National Institute of Mental Health in the US and the World Health Organization to review the limitations of the current classification system of the ICD-10 and DSM-IV and to propose a research agenda exploring the possibility of incorporating a dimensional approach in the future system.

In a future article we hope to be able to report on this and its implications.

Assessment

Areas of development: short and long assessments

In our earlier article we reported that structured interview schedules, particularly tailored to DSM and ICD classifications, had constituted a major advance. Unfortunately, as noticed earlier, these have not proved to be as accurate as we had thought and are coming under criticism. As personality disorder is found in as many as one in ten people in epidemiological assessments, there is great pressure to have shorter reliable scales and questionnaires. Of course, these may invoke the same criticisms as their bulkier forbearers but at least they are quicker to administer and may be useful screening instruments. A recent introduced instrument is the Standardised Assessment of Personality–Abbreviated Scale (Moran et al, 2003).

Longer instruments attempting to overcome the handicaps of common structured interviews include the Shedler-Westen Assessment Procedure (SWAP) (Shedler and Westen, 2004), which is claimed to be more attuned to the clinical concept of personality disorder, and in particular takes account of peoples' inner experiences rather than merely measuring overt behavior patterns.

Etiology

Areas of development

There has been increasing interest in developmental aspects of personality disorder and this has been stimulated by our ability to examine brain function through imaging techniques. The hippocampus and amygdala have been shown to be smaller in those with borderline personality disorder and in some with post-trau-

matic stress disorder and this is felt to be due to failure to develop synaptic connections at critical points in development. Childhood abuse appears to be particularly responsible for these changes (Brambilla et al, 2004) but this may be reversible. The exciting aspect of this work is that it suggests that some abnormal personality features may be preventable or at least corrected easily by early intervention. Attachment orientations have been in focus in psychodynamic research on etiology and behavioral antecedents to personality pathology. However, only few and no recent attempts have been made to explain the associations between the different attachment dimensions and personality disorders.

Management and treatment

Areas of development

In the last 2 years there is an increasing belief that personality disorder has crossed the Rubicon; it is now perceived as a treatable condition. We now have a whole raft of developments that support the idea that a range of interventions may be effective in personality disorder. Even since the time of our last article we have further evidence of effectiveness of psychological therapies, both psychodynamic and cognitive-behavioral (Leichsenring and Leibing, 2003;Tyrer et al, 2004), and there are also new encouraging signs that antidepressants, atypical antipsychotic drugs and mood stabilizers may have a role in treatment (Hollander et al, 2003; Rinne et al, 2002; Zanarini et al, 2004). Treatment is also more focused on reduction of specific features, like self-mutilating and self-damaging impulsive behaviors (Verheul et al, 2003; Tyrer et al 2004) and on the overall social adjustment (Chiesa and Fonagy, 2003). It seems as if therapeutic alliance plays a major role for change more than the specific mode of psychosocial treatment.

However, these successful treatment programs are mostly reported in people with cluster C personality disorders (Svartberg et al, 2004) and borderline personality disorder (Bateman and Fonagy, 2001). This is a large group in clinical practice but there is evidence of a much larger group who never present for treatment for their personality abnormality. The treatment-resisting personality disorders (Type R) may require a completely different type of treatment approach from those with treatment-seeking personalities (Type S) (Tyrer et al, 2003).

Outcome

Areas of development

Outcome studies in personality disorders are difficult to conduct. The presence of comorbidity, lack of specificity of psychotherapies, difficulties in implementing optimal randomized controlled studies, changes of diagnostic criteria and lack of precise outcome measures are the most obvious obstacles to progress and a common approach would be of great value.
By definition personality disorder should be stable and enduring and therefore outcome might not be regarded as a relevant

concept. However, as we indicated above, several recent papers have shown that treatment is effective in the short term. Long-term outcome studies have been limited to antisocial and borderline personality disorder. There is a decline of psychopathology and better social functioning around the age of 40 in those with borderline pathology but those with other personality disorders may retain long-term social dysfunction (Seivewright et al, 2004). A recent 6-year follow-up study of 290 patients, who met the criteria of borderline personality disorder, suggests that borderline psychopathology now may have more rapid improvement and remission than formerly (Zanarini et al, 2003). About three-quarters of the patients had their symptoms remitted after 6 years. Impulsivity resolved most quickly, cognitive and interpersonal problems were intermediate, whilst the affective symptoms were most chronic.

Conclusion

The field is slowly moving from a stage of general speculations and clinical observations about etiology and therapy to more empirical analyses of the basic questions on concepts, etiology, classification, and outcome. New conceptions of personality pathology and new treatment paradigms have led to more tailored integrated therapies designed to address specific personality problems like impulsivity, disconnected, insecure attachment, self-harm, aggression, or mood swings. The good message is that recent well-designed trials have underlined that these treatment programs work for most patients with personality disorders.

The challenge in the future will be to develop a classification system of higher clinical utility. Research on alternative dimensional models in the coming years may pave the way for a new understanding of etiology, promote better assessment, better coverage of personality pathology and more effective guidelines for treatment. Longitudinal studies are needed not only to get a better understanding of the interaction between gene and environment, but also to determine the long-term effects of treatment.

Bibliography

1. American Psychiatric Association. Practice guideline for the treatment of patients with borderline personality disorder. *Am J Psychiatry*. 2001;158(suppl):1-52.
2. Bateman, AW, Fonagy P. Treatment of borderline personality disorder with psychoanalytically oriented partial hospitalization versus general psychiatric care. *Am J Psychiatry*. 2001;160:169-171.
3. Brambilla P, Soloff PH, Sala M, et al. Anatomical MRI study of borderline personality disorder patients. *Psychiatry Res-Neuroimag*. 2004;131:125-133.
4. Chiesa M, Fonagy P. Psychosocial treatment for severe personality disorder. 36-month follow-up. *Br J Psychiatry*. 2003;183:357-362.

5. Hollander E, Tracy KA, Swann AC, et al. Divalproex in the treatment of impulsive aggression: efficacy in Cluster B personality disorders. *Neuropsychopharmacology*. 2003;28:1186-1197.
6. Leichsenring F, Leibing E. The effectiveness of psychodynamic therapy and cognitive behavior therapy in the treatment of personality disorders: a meta-analysis. *Am J Psychiatry*. 2003;160:1223-1232.
7. Moran P. Dangerous severe personality disorder: bad tidings from the UK. *Int J Soc Psychiatry*. 2002;48:6-10.
8. Moran P, Leese M, Lee T, et al. Standardised Assessment of Personality–Abbreviated Scale (SAPAS): preliminary validation of a brief screen for personality disorder. *Br J Psychiatry*. 2003;183:228-232.
9. Rinne T, van den Brink W, Wouters L, van Dyck R. SSRI treatment of borderline personality disorder: a randomized, placebo-controlled clinical trial for female patients with borderline personality disorder. *Am J Psychiatry*. 2002;159:2048-2054.
10. Shedler J, Westen D. Refining personality disorder diagnosis: integrating science and practice. *Am J Psychiatry*. 2004;161:1350-1365.
11. Svartberg M, Stiles TC, Seltzer MH. Randomized, controlled trial of the effectiveness of short-term dynamic psychotherapy and cognitive therapy for cluster C personality disorders. *Am J Psychiatry*. 2004;161:810-817.
12. Seivewright H, Tyrer P, Johnson T. Persistent social dysfunction in anxious and depressed patients with personality disorder. *Acta Psychiat Scand*. 2004;109:104-109.
13. Trobst KK, Ayearst LE, Salekin RT. Where is the personality in personality disorder assessment? A comparison across four sets of personality disorder scales. *Multivariate Behav Res*. 2004;39:231-271.
14. Tyrer P, Simonsen E. Personality disorder in psychiatric practice. *World Psychiatry*. 2003;2:41-45.
15. Tyrer P, Mitchard S, Methuen C, Ranger M. Treatment-rejecting and treatment-seeking personality disorders: Type R, Type S. *J Personality Disord*. 2003;17:265-270.
16. Tyrer P, Tom B, Byford S, et al. Differential effects of manual assisted cognitive behavior therapy in the treatment of recurrent deliberate self-harm and personality disturbance: the POPMACT study. *J Personality Disord*. 2004;18:82-96.
17. Verheul R, van den Bosch LMC, Koeter MWJ, et al. Dialectical behaviour therapy for women with borderline personality disorder: 12 month randomised clinical trial in the Netherlands. *Br J Psychiatry*. 2003;182:135-140.
18. Widiger T, Simonsen E. Alternative dimensional models. *J Personality Disord*. 2005. In press.
19. Zanarini MC, Frankenburg FR, Hennen J, Silk KR. The longitudinal course of borderline psychopathology 6-year prospective follow-up of the phenomenology of borderline personality disorder. *Am J Psychiatry*. 2003;160:274-283.
20. Zanarini MC, Frankenburg FR, Parachini EA. A preliminary, randomized trial of fluoxetine, olanzapine, and the olanzapine-fluoxetine combination in women with borderline personality disorder. *J Clin Psychiatry*. 2004;65:903-907.

Eric Simonsen, Amtssygehuset Fjorden, 10-16 Smedegade, Birkehus 2, Roskilde, Denmark DK-4000
E-mail: rfes@ra.dk, rfdm@ra.dk

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New advances in smoke cessation: its use for educational programs

Rodolfo Fahrer
Section on Psychiatry, Medicine and Primary Care,
World Psychiatric Association

Smoking is a very important topic for the Section on Psychiatry, Medicine and Primary Care as it has been demonstrated that the incidence of smoking among individuals who abuse alcohol, stimulants, and opiates is about 90%. Many of those who work with psychiatric patients have observed that cigarette smoking is extremely common among schizophrenic patients. New neurobiological knowledge has explained why patients with psychiatric disorders smoke. There are nicotine-induced changes in neurotransmitters, and further research is needed to understand nicotine's involvement in the pathophysiology of psychiatric disorders. Maybe future antipsychotics will not only ameliorate psychiatric symptoms but also decrease nicotine dependence in schizophrenic patients.

Major depression is also associated with tobacco use; researchers have found that alcoholism has the highest association with smoking. Smoking rates among patients with anxiety disorders are at least twice that of people without a psychiatric diagnosis.

Studies of the prevalence and use of tobacco at world level shows a plateau or drop of this phenomenon in developed countries, and an increase in developing countries. Surveys carried out in Argentina to establish the prevalence of tobacco use show that about a third or more of the population smokes, there is a tendency to increase the incidence and prevalence among women, and to extend to younger individuals.

In Argentina, the prevalence of tobacco use is one of the highest in the continent, approximately 39% of the adult population and 33% of the teenagers are smokers. A recent survey carried out in schools in the city of Buenos Aires shows that some children smoke from the age of nine. Age has an important influence on tobacco behavior: the age of initiation determines subsequent use, and therefore an early use of tobacco implies a later daily important use. In developed countries, in the 1990s, approximately 21 million individuals have died due to a tobacco-dependence illness. In Argentina, mortality associat-

ed with tobacco use reaches 20% of general deaths, ie, between 38 000 and 49 000 annual deaths. These figures point to tobacco use as one of the main causes of morbidity and premature mortality that could have been prevented.

Moreover, tobacco use is related to different kinds of diseases: cardiovascular disease, cancer, and especially lung cancer, which is today considered as a marker of tobacco use, and COPD (chronic obstructive pulmonary disease).

The extreme complexity of the mechanisms implied in the action and interaction of nicotine and other substances contained in tobacco with different neurotransmitters at a central level, in addition to a long acquired gestural dependence, explains the severity of the dependence and the difficulty for clinical management of most smokers. Therefore, a rational therapy contemplating physical, psychic, and sociocultural factors is needed.

Tobacco dependence derives from three facts: *gestural dependence* (the repeated act), *physical dependence* (addiction, abstinence followed by craving), and *psychic dependence* (pleasure and mood regulation).

At present, I am working with a multidisciplinary team composed of physicians, cardiologists, psychiatrists, psychologists, nutritionists, social workers, nurses, volunteers, etc, on a pilot program for research and care of smokers, at FLENI, Institute for Neurological Research Raúl Carrea (Fahrer R, Raimondi G, Verra F, Ameriso S, Grancelli H, Wainsztein N). The outcome of first results will probably be known in the course of next year. I think the methodology we are developing could become an educational program of the WPA Section on Psychiatry, Medicine and Primary Care for other countries due to the importance of training the Primary Care Physician and the Psychiatrist for detection and treatment of tobacco use.

The program is composed of 4 areas:

- Information area, primary and secondary prevention
- Health care area, secondary prevention
- Training area
- Research area

Information area—primary and secondary prevention

The objective is to participate together with different entities and non-governmental associations in the elaboration of systematic information campaigns addressed to the general public and especially children and teenagers to make them conscious and persuade them about the harmfulness of tobacco, thus avoiding the initial uptake of tobacco use and/or enhancing abstinence. This is done by means of active intervention in schools with information campaigns, interactive workshops with children and teenagers (9-15 years old) in schools.

As a second phase, we intend to carry out educational activities promoting healthy life without toxic habits organizing literary projects for children of sixth and seventh grade to inform and educate them to avoid smoking uptake, and always including the family environment. There will also be artistic activities (music and painting for teenagers) to motivate the avoidance of tobacco use in search of a better quality of life. Moreover, different kinds of publicity "intra-school" to assist the different age groups trying to awake their interest in quitting tobacco and/or to avoid smoking. For the adult population, we have information/educational/motivational community talks on different topics related to tobacco, on a monthly basis.

Health care area—secondary prevention

At present, we know that tobacco use is an addiction and that nicotine is what causes it. Tobacco addiction is due to a complex mechanism where behavior elements (social, individual habits, etc) are mixed with psychological and physical dependence due to nicotine action on the central nervous system; the stimulation of specific receptors produces the release of chemical neurotransmitters.

Our objective at this point is to contribute effective help, with a scientifically validated treatment, to a group of smokers and especially for high-risk patients taking into account side effects of detoxification.

The program includes a specialized center to help quit smoking with a multidisciplinary staff including physicians, cardiologists, psychiatrists, psychologists, nutritionists, etc. The patient is checked for his clinical condition, motivation level, and grade and type of dependence by means of a standardized clinical history and specific laboratory tests: dosage of urinary nicotine and dosage of carbon monoxide in exhaled air. Once classified, they are included in different groups *(Figure 1)*.

Training area

The objective is to design and develop postgraduate teaching courses for professionals to train for the treatment of patients with tobacco dependence. These health professionals should acquire knowledge of pathophysiological mechanisms of tobacco addiction and their treatment. This will eventually lead to a drop of tobacco use and is important also because 70% of smokers consult with a physician at least once a year. It implies a direct contact with several million smokers and this might be the opportunity for the primary care physician to actively participate in the motivation and treatment of this dependence.

In the last grade year and during the postgraduate training there will be a course of practical training on dependence and treatment of tobacco use. At the end of the course, the physician must know the impact of tobacco use on diseases, must be able to evaluate the

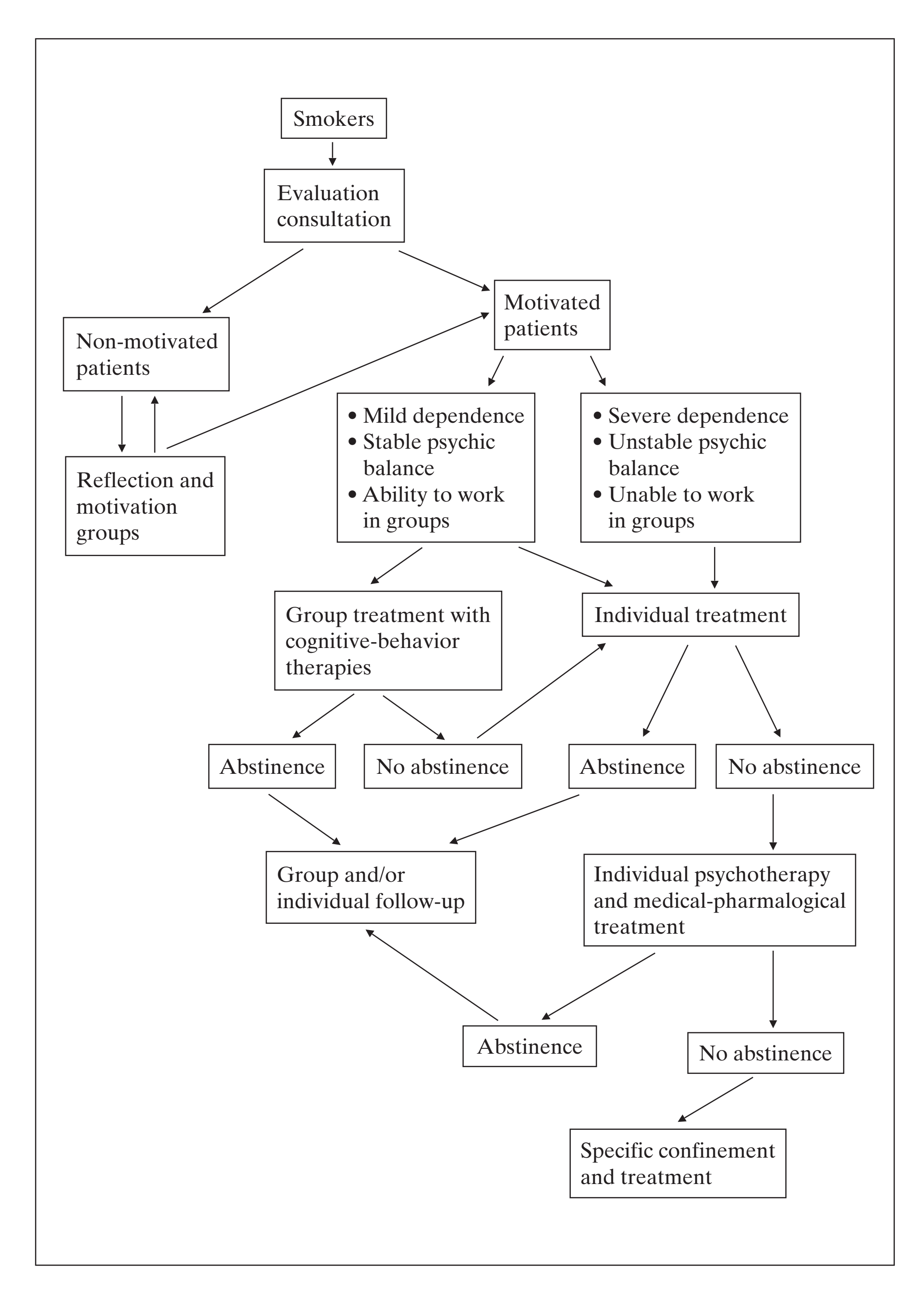


Figure 1. Treatment algorithm

grade and type of dependence, must approach the dependent patient, motivate him to change, and manage pharmacological resources for specific treatment, and must be acquainted with useful steps to achieve a lasting remission. The course will have a duration of 24 hours and preferentially be developed in 1 or 2 consecutive days, during the weekends, to facilitate access to professionals who live far away from the academic centers.

Research area

The objective is to create multidisciplinary research programs with tobacco use as their main denominator. The research studies will all be related to tobacco use and prevalent pathologies. The Directors of the program are Dr Guillermo Raimondi and myself, the General Coordinator is Dr Fernando J Bartolomé Verra, and the Investigators are Dr Sebastián Ameriso, Dr Hugo Grancelli, and Dr Néstor Wainsztein. An overview of all the inpatients is being currently developed to have sound data of prevalence of tobacco use, to be later on cross-referenced with other obtained data. More than 400 patients in different services have been reviewed, and we hope to have a partial outcome analysis in the first quarter of next year.

From the start of this program, we are giving lectures about problems associated with tobacco use to the general staff and particularly to staff involved in health care. The aim is to make them more sensitive about this problem and to motivate them to become prevention vectors deriving in information, motivation and referral vehicles for smoking patients and their environment.

There is a need worldwide to recognize that tobacco use is an addiction, which also causes co-morbidity and mortality. As usual, education is what we need to do first of all. We cannot emphasize enough the need for educational programs to train the primary care physician and the psychiatrist for early intervention and treatment of smokers. Research into treatment methods to enhance rates of smoke cessation must be actively pursued. There are already available guidelines for efficacious and cost-effective treatments. We also need the health professionals to incorporate simple interventions into their daily practice of medicine. Advice to the patient does not require costly specialist training, it can be given in the doctor's own words in face-to-face contact.

We believe that effective diffusion, dissemination, and implementation of specialized programs such as the one we have launched at FLENI, Institute for Neurological Research Raúl Carrea, Buenos Aires, in addition to nicotine replacement combined with behavior modification therapy and, if necessary, adding pharmacological treatment, will result in relieving nicotine withdrawal symptoms and initiate smoking cessation.

Bibliography

1. Anderson JE, Jorenby DE, Scott WJ, Fiore MD. Treating tobacco use and dependence: an evidence-based clinical practice guideline for tobacco cessation. *Chest*. 2002;121:932-941.
2. Breslau N, Johnson EO, Hiripi E, Kessler R. Nicotine dependence in the United States: prevalence, trends and smoking persistence. *Arch Gen Psychiatry*. 2001;58:810-816.
3. Brody AL, Mandelkern MA, London ED, Childress AR, Lee GS, Bota RG, Ho ML, Saxena SD, Jarvik ME. Brain metabolic changes during cigarette craving. *Arch Gen Psychiatry*. 2002;59:1162-1172.
4. Cheng LS, Swan GE, Carmelli DA. Genetic analysis of smoking behavior in family members of older adult males. *Addiction*. 2000;95:427-435.
5. Fowler JS, Volkow ND, Wang GJ, Pappas N, Logan J, MacGregor R, Alexoff D, Shea C, Schyler D, Wolf AP, Warner D, Zezulkova I, Cilento R. Inhibition of monoamine oxidase B in the brains of smokers. *Nature*. 1996;379:733-736.
6. Jorenby DE, Leischow SJ, Nides MA, Rennard SI, Johnston JA, Hughes AR, Smith SS, Muramoto ML, Daughton DM, Doan K, Fiore MC, Baker TB. A controlled trial of sustained-release bupropion, a nicotine patch, or both for smoking cessation. *N Engl J Med.* 1999;340:685-691.
7. Killer JD, Fortmann SP, Schatzberg AF, Hayward C, Sussman L, Rothman M, Strausberg L, Varady A. Nicotine patch and paroxetine for smoking cessation. *J Consult Clin Psychol*. 2000;68:883-889.
8. Kolber M, Spooner GR, Szafran O. Adverse events with Zyuban (bupropion). *CMAJ*. 2003;169:103-104.
9. Law M, Tang JL. An Analysis of the effectiveness of interventions intended to help people stop smoking. *Arch Intern Med*. 1995;155:1933-1941.
10. Malone KM, Waternaux C, Haas GL, Cooper TB, Li S, Mann JJ. Cigarette smoking, suicidal behavior, and serotonin function in major psychiatric disorders. *Am J Psychiatry*. 2003;160:773-779.
11. Prochaska JO, Di Clemente CC et al. States and processes of self-change of smoking: towards an integrative model of change. *J Consult Clin Psychol*. 1983;51:2065-2069.
12. Silagy C, Mant D, Fowler G, Lodge M. Meta-analysis on efficacy of nicotine replacement Therapies in smoking cessation. *Lancet*. 1994;343:139-142.
13. Stolerman IP, Shoaib M. The neurobiology of tobacco addiction. *Trends Pharmacol Sci*. 1991;12:467-473.
14. Wolf AP, Warner D, Zezulkova I, Cilento R. Inhibition of monoamine oxidase B in the Brains of smokers. *Nature*. 1996;379:733-736.
15. Working Group for the study of transdermal nicotine in patients with coronary artery disease. Nicotine replacement therapy for patients with coronary artery disease. *Arch Intern Med*. 1994;154:989-995.

Rodolfo Fahrer, Emeritus Professor, Department of Mental Health, University Hospital School of Medicine, University of Buenos Aires, 2436, J. Salguero, 8 Floor, Buenos Aires, Argentina
Chairman of the Department of Psychiatry, FLENI, Institute for Neurological Research Raúl Carrea, Montañeses 2325, (C1428AQK) Buenos Aires, Argentina
E-mail: fahrer@ciudad.com.ar

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Fighting stigma and discrimination because of mental disorders

Heather Stuart, Norman Sartorius
Section on Stigma and Mental Disorders, World Psychiatric Association

Introduction and purpose

The scourge of psychiatric stigma is increasingly being recognized by professional organizations worldwide. Fighting stigma and discrimination because of mental disorders has become a major international challenge. This chapter will provide a short overview of the nature, origins, and consequences of stigma; then address approaches to fighting stigma and discrimination. It will close with some brief considerations regarding the future role of the World Psychiatric Association's Section on Stigma and Mental Disorders.

On the nature, origins, and consequences of stigma

Ancient Greek citizens pricked brands on their slaves using a pointed instrument called a *stig*. The resulting *stigma* marked their ownership and signified that they belonged to a group that was unfit for citizenship (Falk, 2001). Classic theoretical treatments of stigma describe a social process that begins with the recognition of a difference based on a mark or other distinguishing feature. With respect to psychiatric stigma, the mark may be visible, such as an obvious sign or symptom; or invisible, such as a psychiatric diagnosis or history of psychiatric treatment (Goffman, 1963).

Social-psychological theories of stigma identify three mechanisms of action (see Goffman, 1963; Corigan, 2000; Link and Phelan, 2001). Stigma may 1) be self-imposed, occurring when cultural stereotypes are internalized, self-esteem is undermined, and social contact is avoided; 2) be imposed through interpersonal interactions, through the direct expression of negative stereotypes, socially rejecting attitudes and discriminatory behaviors; or 3) find expression at a social-structural level through institutional practices that limit access to social and legal entitlements and perpetuate powerlessness and marginalization. These multiple and interrelated mechanisms for expression make stigma insidious and exceedingly resistant to change.

The consequences of stigma are profound. Stigma creates a vicious cycle of rejection and disadvantage that surrounds all of those who live with a mental disorder, as well as the health and social systems designed to support them. For those with a mental illness, experiences of stigma are more long lasting, life limiting, and disabling than the illness itself. Stigma destroys self-esteem, disrupts normal social and family relationships, impedes recovery, and promotes social disability and disadvantage. It is a deeply discrediting and isolating experience with associated feelings of guilt, shame, inferiority, and a wish for concealment. Stigma is also deeply discrediting for families. It engenders feelings of shame, lowered family esteem, anger, secrecy, and distrust. It not only disrupts interactions within the family, it may also limit interactions between family members and their wider social networks. Families may be blamed for causing the illness and faulted for harboring members who are perceived to be socially offensive and publicly dangerous. Stigma also surrounds mental health professionals who are themselves viewed with disrespect, hostility, and suspicion; and mental health systems that are understaffed, under funded, and unable to garner public confidence or respect. Finally, stigma also impedes the generation of new knowledge about mental illnesses and their treatments by limiting research funding, personnel, and facilities. For these reasons, stigma has been declared the most significant challenge for the mental health community (Sartorius, 2004).

Stigma as a barrier to mental health development

Discriminatory policies leading to infringements on human rights and the denial of social or legal entitlements can be traced back to stigmatizing attitudes and a lack of knowledge about the modern treatment options available for people with mental disorders. Moreover, discriminatory policies and practices are prevalent in developed and developing countries alike. For example, Canada—a country with a highly developed health care system—explicitly excludes psychiatric hospitals from federal legislation guaranteeing universal coverage for health care (Government of Canada, 1985). Elsewhere, mentally ill are denied life insurance, disability entitlements, and income security. They may have difficulty finding secure housing, employment, and needed treatments, or they may languish in institutions where even their names are forgotten (Arboleda-Flórez, 2001).

Custodial models of care greatly contributed to the stigmatization of the mentally ill through their segregation in overcrowded facilities that were poorly funded and inadequately maintained. Mental health reform, with a focus on community integration and non-institutional care has been seriously undermined by public fear and intolerance (Arboleda-Flórez, 2003). Reducing stigma and discrimination has become an important goal for professional organizations worldwide. In 1996, the World Psychiatric Association launched a

global program to reduce stigma and discrimination associated with schizophrenia, which is now operating in over 20 countries (Sartorius, 2004). In 2001, the World Health Organization focused their World Health Report on Mental Illness in an attempt to develop international momentum for reducing the burden caused by mental disorders (World Health Organization, 2001a). This was followed by a call to action to health ministers at the 54th World Health Assembly through ministerial roundtables focusing on mental health (World Health Organization, 2001b), a global advocacy program for World Health Day (World Health Organization, 2001c), and a global action program designed to raise awareness of the importance of investing in mental health (World Health Organization, 2003).

The first international scientific conference on stigma, *Together Against Stigma*, was held in Leipzig, Germany in 2001, and a second was held in Kingston, Canada in 2003. In 2004, the World Association for Social Psychiatry, World Psychiatric Association, World Association for Psychosocial Rehabilitation, World Federation for Mental Health, and the Japanese Society for Social Psychiatry issued a joint statement urging the United Nations to recognize the importance of mental health problems and promote an anti-stigma movement to improve acceptance and treatment of mental disorders worldwide (Kobe Declaration, 2004). Also in 2004, the Council of European Ministers of Health pledged their support for anti-stigma activities in a special ministerial meeting that was convened by the Ministry of Health of Greece. In January of 2005, the WHO Ministerial Conference on Mental Health marked the occasion for the adoption of the Mental Health Declaration and the Mental Health Action Plan for Europe. Priorities for the next decade identified in the Declaration include collectively tackling stigma, discrimination, and inequality and empowering people with mental health problems and their families to be actively engaged in this process (*Science and Care*, 2004).

Scholarly and scientific interest in stigma is also growing. *Figure 1* shows the number of articles published in Medline and PsychInfo with a main focus of mental health and with the words stigma or discrimination in the title or abstract. Throughout the 1980s and early 1990s,

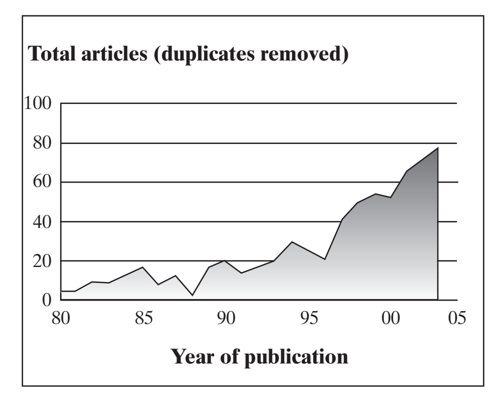


Figure 1. Medline and PsychInfo publications focusing on stigma and discrimination related to mental disorders, 1980-2004

there was little scholarly interest in the issue, with less than a handful of papers being published in any given year. The number of publications began to rise in the mid 1990s until their current level of almost 100 per year. Even though this represents a significant increase, it still amounts to less than 2% of all publications relating to mental disorders—a level that is incommensurate with the burden caused by stigma and the growing public health interest in this topic.

Approaches to fighting stigma and discrimination

Although scholarly interest and practical experience is growing, the evidence base supporting stigma change remains underdeveloped. Thus, it is not yet possible to speak authoritatively about best practices in the field. The complexity of the problem and the breadth of interventions tried complicate comparisons across studies. Programs differ with respect to whether their goal is to change knowledge, attitudes, or behaviors; the groups targeted to receive the interventions; the scale of the intervention; the actual interventions used; and the evaluation measures employed.

Anti-stigma strategies can be broadly grouped into three approaches, depending on whether they use education, protest, or interpersonal contact to effect change (Corrigan and Penn, 1999). Protest efforts challenge social stereotypes by protesting inaccurate or hostile public images in the media and elsewhere. Educational programs aim to promote attitudes that are more positive by providing accurate information about mental illness and its treatment. Contact approaches reduce stigma by promoting opportunities for members of the public to have positive interactions with people who live with mental illness. These approaches have been used in various combinations by programs to target changes in knowledge, attitudes, and behaviors. One intervention model that has been used to fight stigma and discrimination because of schizophrenia by World Psychiatric Association's *Open the Doors* Programme views stigma as a series of vicious cycles that unfold at the level of the individual, the family, and the mental health community. These cycles may be interrupted at any point to disrupt stigma; the point of intervention depending on local priorities and feasibility (Sartorius and Schulze, 2005).

Programs that target knowledge

Efforts to improve public knowledge about the causes and treatments of mental disorders have been much less common for psychiatric disorders than for other illnesses such as cancer or heart disease, perhaps itself a reflection of stigma. Large public education and media awareness campaigns have been tried in several countries (such as the UK and USA) with the goal of improving symptom recognition and appropriate treatment-seeking behavior. Pre- and post-population surveys have shown improvements in the knowledge areas targeted, but the effects on treatment seeking remain unknown (Jorm, 2000).

Elsewhere, in Canada and Australia, public education campaigns have targeted change in public perceptions of the mentally ill. Pre- and post-surveys showed that they increased awareness, but had little effect on stereotypical views or public acceptance for people with serious mental illness (Stuart and Arboleda-Flórez, 2001; Stuart, 2003a; Rosen et al, 2000) and no appreciable effect on the day-to-day lives of those living with a mental disability (Rosen et al, 2000). Although potentially effective in improving public literacy concerning symptom recognition and treatment options, it is unclear whether large public education campaigns will prove to be an effective means of reducing discrimination towards the mentally ill.

Programs that target attitudes

Stereotypes involve a cognitive component as well as an affective component. A second approach to reducing stigma is to change the way members of the public feel toward people with a mental disorder by replacing negative stereotypical images with positive ones. The goal is to replace feelings of fear and rejection that are tied to negative stereotypes, with feelings of understanding, respect, compassion, and acceptance.

Structured discussions with people who are successfully managing their mental illness have been used to target the affective component of stereotypes. This approach has been reported to promote more positive attitudes in both Western and non-Western cultures (Couture and Penn, 2003). Structured discussions require small, targeted interventions, which are difficult to apply in large populations. Much less is known about the population effects of indirect contact created through media champions and role models, theater performances by people who have mental disorders, or through the promotion of artistic accomplishments such as art exhibitions.

Programs that successfully promote positive interactions with the mentally ill must compete with the daily onslaught of negative news and media images that reinforce the message that people with mental disorders are dangerous, unpredictable, and should be avoided. The most damaging are sporadic acts of violence by someone with a mental disorder. These are instantly multiplied through untold numbers of televisions, radios, and newspapers, giving the mistaken impression that violence by the mentally ill is a frequently occurring event. The occasional visual images caught by news cameras-on-the-scene authenticate negative images played out in television and movie dramas, thereby reinforcing public expectations that violence by the mentally ill is a frequently occurring event (Haghigat, 2001). The public greatly exaggerates the frequency of violence among the mentally ill as well as their own personal risk, and is willing to support restrictive legislation and coercive treatments as a result (Stuart, 2003b).

Programs that target discrimination

It is unclear whether positive cognitive or emotional change translates into greater social acceptance and less discrimination for the mentally ill and their families. Social advocacy programs explicitly target unfair policies and practices in order to change the way in which organizations and people act to limit the social and legal entitlements of the mentally ill. Because of a tendency to focus on the individual characteristics of stigma, rather than on the social structures that create and maintain discriminatory practices, social advocacy approaches are greatly underused (Link and Phelan, 2001). Notable exceptions are the various stigma-watch programs designed to promote a more respectful depiction of mental illness in the news, product advertising, the media, or television. One example is the Stigma-Watch program of SANE Australia (www.sane.org). When notified of an instance of objectionable reporting, StigmaWatch staff contact those responsible and educate them about the harmful effects of negative stereotyping. They find the majority of people are willing to change once the harm is explained. Only in a minority of situations is more assertive lobbying required. Conversely, in the province of Nova Scotia, Canada, attempts by the local mental health community to censor objectionable words found in newspapers resulted in a negative backlash from the media including ridicule of the "world mental health police," perhaps causing more harm than good.

Consumer experiences with stigma and discrimination

To be effective, anti-stigma interventions must consider the stigma experiences of people who live with mental disabilities (Sartorius, 2002). As yet, there are a limited number of surveys that document the frequency and impact of actual experiences of stigma from the perspective of those stigmatized (see Wahl 1999). Few programs use the real life experiences of people living with a mental illness to target their interventions and virtually none have judged their effects against improvements made in the day-to-day lives of people who live with mental disorders. A notable exception to this is the World Psychiatric Association's global program to *Fight Stigma and Discrimination because of Schizophrenia*, which begins with an analysis of patient and family experiences with stigma in order to select program targets (Sartorius, 2002). Additional information on this unique, multi-centered global program can be found at openthedoors.com.

Future directions

Although the knowledge base supporting anti-stigma programming is at an early stage of development, interest in this topic will continue to grow. The impetus will come from several areas: the increasing emphasis on health-related quality of life as an important treatment outcome in all chronic conditions; successes in fighting stigma and discrimination in other disabling conditions such as HIV/AIDS or leprosy; the growing understanding of

psychiatric epidemiology and the burden associated with mental disorders; and the role of stigma in the creation and maintenance of psychiatric disability.

The World Psychiatric Association has identified stigma as a major impediment to recovery and made a significant contribution towards its eradication through its global program to fight stigma caused by schizophrenia. Building on this momentum, it is now timely that WPA develops a scientific section devoted to the broader issue of stigma as it applies to all mental illnesses.

The agenda of the Stigma and Mental Illness Section is to provide scientific leadership by disseminating scholarly information about stigma and discrimination because of mental disorders through academic and technical publications, symposia, and courses offered at WPA regional meetings and international congresses. Members of the section will actively work to advance scientific knowledge about stigma through collaborative research and evaluation and will provide training opportunities to support the development of effective anti-stigma programs.

Bibliography

1. Arboleda-Flórez, J. Considerations on the stigma of mental illness. *Can J Psychiatry*. 2003;48:645-650.
2. Arboleda-Flórez J. Stigmatization and human rights violations. In: *World Health Organization, Mental health. A Call for Action by the World Health Ministers*. Geneva, Switzerland: World Health Organization; 2001.
3. Corrigan PW. Mental health stigma as social attribution: implications for research methods and attitude change. *Clin Psychol: Sci Pract*. 2000;7:48-67.
4. Corrigan PW, Penn D. Lessons from social psychology on discrediting psychiatric stigma. *Am Psychol*. 1999;54:765-776.
5. Couture SM, Penn DL. Interpersonal contact and the stigma of mental illness: a review of the literature. *J Ment Health*. 2003;12:291-305.
6. Falk G. *Stigma: How We Treat Outsiders*. New York, NY: Prometheus Books; 2001.
7. Goffman E. *Stigma: Notes on the Management of Spoiled Identity*. Englewood Cliffs, NJ: Prentice Hall; 1963.
8. Government of Canada. Canada Health Act. Available from: http://laws.justice.gc.ca/en/C-6/text.html (accessed March 26, 2005).
9. Haghighat R. A unitary theory of stigmatisation. *Br J Psychiatry*. 2001;178:207-215. 1985.
10. Jorm AF. Mental health literacy. *Br J Psychiatry*. 2000;177:396-401.
11. Kobe Declaration. World Association of Social Psychiatry. Available from http://www.wpanet.org/bulletin/wpaeb2103.html (accessed February 28, 2005). 2004.
12. Link B, Phelan JC. Conceptualizing stigma. *Ann Rev Sociol*. 2001;27:363-385.
13. Rosen A, Walter G, Casey D, Hocking B. Combating psychiatric stigma: an overview of contemporary initiatives. *Australasian Psychiatry*. 2000;8:19-26.

14. Sartorius N. Iatrogenic stigma of mental illness. *Br J Psychiatry*. 2002;324:1470-1471.
15. Sartorius N. The World Psychiatric Association Global Programme against Stigma and Discrimination because of Stigma. In: Crisp AH, ed. *Every Family in the Land* (revised edition). London, UK: Royal Society of Medicine Press; 2004.
16. Sartorius N, Schulze H. *Reducing Stigma Due to Mental Illness: a Report from a Global Program of the World Psychiatric Association*. Cambridge: Cambridge University Press; 2005.
17. Science and care. Bull WPA Scientific Sections. 2004;4:12.
18. Stuart H. Stigmatisation. Leçons tirées des programmes de réduction. *Santé Mentale au Québec*. 2003a; 28:37-53.
19. Stuart H. Violence and mental illness: an overview. *World Psychiatry*. 2003b;2:120-124.
20. Stuart H, Arboleda-Flórez J. Community attitudes toward people with schizophrenia. *Can J Psychiatry*. 2001;46:245-252.
21. Wahl O. Mental health consumers' experience of stigma. *Schizophr Bull*. 1999;25:467-478.
22. World Health Organization. *The World Health Report 2001—Mental Health: New Understanding and Hope*. Geneva, Switzerland: World Health Organization; 2001a.
23. World Health Organization. *Mental Health: A Call for Action by World Health Ministers*. Geneva, Switzerland: World Health Organization; 2001b.
24. World Health Organization. *Results of a Global Advocacy Campaign*. Geneva, Switzerland: World Health Organization. 2001c.
25. World Health Organization. *Investing in Mental Health*. Geneva, Switerland: World Health Organization; 2003.

Heather Stuart, Queen's University, Canada
E-mail: hh11@post.queensu.ca

Methodology

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Measurement in psychiatry: novel concepts and instruments

Aleksandar Janca, Jane Ventouras
Section on Measurement Instruments in Psychiatric Care, World Psychiatric Association

One of the objectives of the WPA Section on Measurement Instruments in Psychiatric Care is to report information on the existing and new measurement concepts and instruments in psychiatry. In our preceding paper, "Psychiatric assessment instruments: a review of recent developments" (Janca and Isaac, 2002), we discussed several key trends appearing in the context of development of contemporary psychiatric measurement models. For example, a variety of new instruments were being developed in order to refine the measurement of specific psychiatric syndromes, others were being designed for use within specific treatment settings, and several qualitative research techniques were being employed to address issues such as cross-cultural applicability of diagnostic models. Such trends were seen as being the result of a recent shift in the interest of researchers and clinicians, whereby the emphasis was no longer upon achieving standardized and comprehensive evaluation of psychiatric diagnoses, but upon attaining more efficient and flexible evaluation of different dimensions of a variety of psychiatric syndromes, and upon exploring characteristics, consequences and impact of mental disorders in specific treatment and sociocultural settings.

In the same paper, we acknowledged the benefits gained from such a change of perspective, but maintained a continued need for psychiatric assessment methods to be standardized, and proposed a need to promote the clinical significance of symptoms and syndromes in diagnostic assessments, particularly to determine treatment needs. In recent years, the research conducted by the members of our WPA Section has contributed towards addressing both requirements through the development and evaluation of several novel concepts and measurement instruments to be used in psychiatry, of which two will be discussed in this paper.

Continuity of Life concept and instrument

The Continuity of Life (COL) project entails the further development and evaluation of this novel psychiatric con-

cept and its accompanying instrument, the Continuity of Life Interview (COLI). Both COL and COLI were developed in response to the problems arising from the lack of consistency among tools used to evaluate aspects of health-related quality of life (QOL).

Over the past few decades, the QOL concept has become increasingly popularized as the number of possible applications and measurement models available has expanded, causing the term "quality of life" to become over-inclusive and quite abstract. Obvious problems arise from this lack of a universal definition and instrument, including difficulty in selecting from the range of models available, deciphering what model has been used in the results being analyzed, and comparing outcomes of different studies. Consequently, the value of the concept within clinical, epidemiological and service evaluation research has been questioned (Janca and Cooper, 2002).

From such limitations of QOL came the concept of COL, which can be defined as "the degree to which an event or process has interrupted the continuity of an individual's life with regard to his or her activities, hopes and plans" (Kuehner and Cooper, 1999). Consideration of future thoughts and plans distinguishes COLI from most other psychiatric assessment tools, and we believe this unique aspect of inquiry is important to efficient assessment. What a patient expects the future to hold, aspires to achieve later in life, and if and how these perceptions have changed because of a mental illness, are extremely important aspects of investigation in the assessment and treatment of the person with the mental illness. The COLI records a person's perception of the degree to which an event/process (such as mental illness) has interrupted his/her life with reference to the following life domains:

- Access to material possessions
- Work, studies, professional career
- Relationships with family
- Relationships with friends
- Leisure and recreation
- Personal mental health
- Personal physical health
- Rights, duties, and responsibilities
- Personal beliefs and/or religious faith

One of the objectives of the COL project was to evaluate and improve the psychometric properties of the COLI by: (1) refining the structure of the schedule and producing a glossary of terms, guidelines and instructions for interviewees; (2) assessing inter-rater and test-retest reliability of the instrument; and (3) evaluating its ability to measure long-term outcomes of psychiatric treatment and rehabilitation programs.

In order to evaluate the inter-rater and test-retest reliability of COLI, experienced clinical staff administered the instrument upon 32 individuals aged between 18 and 63 years who were receiving psychiatric services, but were not acutely psychotic. Each individual was assessed on two separate occasions.

During the first session, two interviewers were present and one administered the COLI with the other silently observing but also rating the patient's responses. The second interview was conducted 3 days later by one sole interviewer. Following the interviews, discrepancies between ratings from the first interviewer (not the observer) and the second interviewer were investigated, utilizing a discrepancy sheet. Evaluations of the discrepancies in ratings were used in determining inter-rater and test-retest reliability of the COLI. COLI demonstrated appropriate inter-rater and test-retest reliability, which can be seen from the calculation of average kappa coefficients (0.84 and 0.45, respectively). The average administration time of the instrument was 25 minutes and the interview questions were well received and understood by the patients. In summary, COLI was found to be an effective and reliable instrument for evaluating the degree to which mental illness interrupts the continuity of an individual's personal life with regard to his or her activities, hopes and plans.

During the next phase of the project, COLI was used as a tool for measuring the long-term outcomes of a psychiatric rehabilitation program. COLI was administered to a sample of 30 clients with chronic and severe mental illness (23 had diagnosis of schizophrenia or bipolar disorder) at both the commencement and completion of the 8-week rehabilitation block. The results of this COLI evaluation exercise showed 35% positive change in the present state of the clients (ie, less impact of mental illness on present life situation) and 48% positive change in future expectations (ie, more hope and optimism). COLI areas that showed particularly great change after 8 weeks of psychiatric rehabilitation were "accesses to material possessions" for the present state and "rights, duties, and responsibilities" for future expectations of the clients. The 6- and 12-month follow-up evaluations of the clients using COLI are currently underway, in which plan to further demonstrate long-term outcomes of psychiatric rehabilitation.

Social rituals concept and instrument

The concept of a prodrome, or the very earliest signs of the onset of a mental disorder, is well known in clinical psychiatry, and refers to disturbances of ordinary behavior that may precede the behavior and experiences that constitute recognized psychiatric symptoms and signs. In the literature, however, prodromes are described simply by means of lists of behaviors, such as avoidance of meeting other people, irritability, polite greetings absent or minimal, poor table manners, conversation avoided or kept to a minimum, and lowering of standards of personal appearance and hygiene.

To achieve a systematic approach that should ensure a more thorough review of a person's pre-symptomatic behavior than the usual clinical enquiry based on a simple list, our Social Rituals project uses

some concepts from social anthropology. In the context of this study, social rituals are defined as common, ordinary activities that are an essential and expected part of everyday life in most cultures, such as greetings, farewells, giving thanks, general good manners, polite eating customs, and the wearing of conventional clothing. These rituals constitute a large part of the fabric or structure of everyday life, and, in ordinary circumstances, are automatic and reciprocal between the two or more persons involved. However, if one of a pair omits an expected social ritual, such as a greeting, a request ("please"), or thanks, a feeling of offence or dissatisfaction is created in the person who should have been the recipient of the ritual phrase, and also probably in any other persons who might witness the omission. This makes it likely that they will remember the unusual behavior. As noted, "social" implies interaction between two or more persons, so anything, which diminishes or changes the normally expected interaction between persons, as many mental disorders do, can also be expected to involve reciprocal social rituals.

Everyday life in all cultures is composed of a mixture of direct actions and ritual actions. The ritual actions act as reminders and reassurances of social status and personal relationships, and also as facilitators of direct actions that are necessary for survival activities. Our project is concerned only with describing social rituals, and not with the extent to which the subjects are engaged in other direct actions.

To examine such a relationship between social rituals and mental health, our WPA Section decided to develop an instrument to measure changes in ritualistic behavior during the prediagnostic stages of mental illness, and explore whether it could be used as a tool for early detection of individuals who are in, or at risk of soon developing poor mental health. The resultant Social Rituals Interview consists of 10 distinct domains, which are based upon universal social rituals identified via extensive cross-cultural investigation. As referred to above, our project involved a unique approach to psychiatric research, whereby anthropologists performed cross-cultural analysis of socio-anthropological studies and literature in order to investigate human universals of behavior and ultimately decide the instrument areas of investigations, which are as follows:

- Personal appearance
- Personal hygiene
- Communication
- Eating habits
- Sleeping habits
- Sense of privacy
- Sexuality
- Avoidance rituals
- Greeting and leave-taking rituals
- Rules of polite behavior

The Social Rituals Interview format is semi-structured, questions are worded in a conversational rather than technical manner, and the sequence can be altered to fit the flow of discussion. Interviewees are asked to rate the level of change within each domain with a score between 0

(no change or full respect of social rituals) and 3 (severe change or disregard of social rituals in a particular domain noticeable by a wider community and causing serious concern).

Once the draft instrument was finalized, mental health professionals administered it upon 30 patients with a variety of mental disorders. The interview was then conducted with a close relative or other carer nominated by the patient, and the questions were asked in relation to the patient's appearance and behavior. The aim was to first note any observed variation in frequency and direction of social rituals prior to the diagnosis of the current mental disorder, and to then detect any discrepancies in the variation perceived by the patient and the carer.

Data analysis found moderate to severe changes in most of the 10 social ritual domains, meaning there is often an observable disrespect of such rituals during the prediagnostic stages of mental illness. Ritualistic behavior such as that relating to communication, personal hygiene and avoidance rituals were areas of conduct in which both patients and carer reported similar awareness of behavioral variation. Knowledge of activities in which changes are typically evident to both parties may help form a general checklist for mental health professionals to use when they suspect a client may have been developing an early episode of mental illness. On the contrary, instances in which patient-carer responses differed greatly, and it was generally a carer noting more variance, may imply aspects of behavior that transform, and the delusional thoughts that often prompt such modifications, which are typically unobserved and unreported by a patient. Knowledge of behavioral changes patients are often unaware of allows mental health professionals better insight into aspects of a condition that may remain unexpressed by a patient. In general, the study demonstrated the clinical usefulness of the social rituals concept and accompanying instrument in early detection of mental illness and therefore in facilitating early intervention in prodromal stages of mental disorders.

Bibliography

1. Janca A, Cooper JE. Measurement of some novel concepts in psychiatry. *World Psychiatry*. 2002;1:107-108.
2. Janca A, Isaac M. Psychiatric assessment instruments: a review of recent developments. In: Christodoulou GN, ed. *Advances in Psychiatry*. Athens, Greece: Beta Medical Publishers; 2002:99-106.
3. Kuehner C, Cooper JE. Quality of life assessment in mental health research: a pilot study of the continuity of life interview. Presented at the World Psychiatric Association Section on Epidemiology and Public Health Symposium "From Epidemiology to Clinical Practice", Turku, Finland, 1-4 August, 1999.

Aleksandar Janca, Professor of Psychiatry, The University of Psychiatry and Clinical Neurosciences, MRF Building, 5o Murray Str. Perth, Australia WA 6000
E-mail: ajanca@cyllene.uwa.edu.au

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Recent developments in the methodology of drug development

Marc-Antoine Crocq, Jean-Paul Macher, Rémy Luthringer
Section on Research Methods in Psychiatry, World Psychiatric Association

Over the last years, the World Psychiatric Association Section of Research Methods has organized a series of workshops and conferences on the methodology of drug development. This series of conferences was entitled "New Protocols for New Drugs," to express the widely shared realization that innovative drugs are urgently needed, but that the likelihood of discovering them can be enhanced only by modernizing our research protocols, in the light of the current state of scientific knowledge. What follows summarizes some of the key issues discussed at these conferences.

The evolution of drug discovery in psychiatry–from serendipity to bioinformatics

The first representatives of the major classes of psychotropic drugs were discovered in the 1950s by a process of serendipity, ie, the fortuitous discovery of the therapeutic effect in small groups of patients. The best known examples are the discovery of the therapeutic effects of chlorpromazine (Deniker, 1952) (on July 27, 1952, at the yearly congress of French-speaking psychiatrists in Luxembourg, Pierre Deniker presented more detailed results obtained in an enlarged sample of 38 patients) and imipramine (by Roland Kuhn, who reported the effects observed in 40 patients treated for over 18 months, in Switzerland, in 1957). Since these historical discoveries, several factors have contributed to transform drug discovery in psychiatry. New tools for the investigation of the central nervous system (CNS) have emerged; the most graphic example is the development of imaging technology. The binding of compounds to brain receptors can now be visualized by brain imaging techniques. For instance, various neuropharmacological studies with SPECT in schizophrenia have characterized D_2 receptors, as well as D_2 receptor occupancy, after treatment with atypical antipsychotics (Frankle, 2002; Heinz, 2000).

The availability of new tools and the possibility of assessing biological abnormalities associated with psychiatric dis-

orders has led to the attempt to validate biological markers, or "biomarkers," that may respond to drug treatment. This endeavor is not new: ever since Kraepelin, psychiatrists have tried to complement phenomenological description with pathophysiological markers. The symptoms assessed in rating scales are not specific, but shared by several disorders. For instance, the Hamilton rating scale for depression includes symptoms that are also presented by patients with a variety of anxious disorders. Therefore, there have been efforts to measure the outcome of drug trials not only with clinical rating scales, but also with parameters reflecting the etiology or pathophysiology of the disease. For instance, REM sleep changes have been used as a surrogate marker of antidepressant response (Staner, 1999), or as a marker showing the action of compounds on cholinergic neurotransmission in the development of cognitive enhancers for Alzheimer's disease.

As will be discussed later, the search for biomarkers has led to the development of illness models, which can be used to test the effectiveness of new compounds. In the last decade, molecular biology, genomics, proteomics, bioinformatics, and automation have revolutionized drug development (Paul, 1999). The cloning of the human genome has led to the identification of hundreds of receptors, all of them potential drug targets. However, testing the clinical effects of the myriads of compounds binding with these receptors is a colossal and daunting task.

Current difficulties in drug development

Drug development is in many aspects a Procrustean bed, ie, the necessity to fit into a rigid and unnatural pattern. Both for economic and medical reasons, there is a crucial need to demonstrate the activity of newly discovered compounds as early as possible, and to orientate these compounds toward the adequate therapeutic area. The imperative is not so much to establish lack of toxicity and the presence of favorable pharmacokinetics, but rather to demonstrate clinical efficacy. Indeed, it is this parameter alone, not toxicity or pharmacokinetics, that will ultimately decide whether the drug will thrive or fail on the market. However, current drug trials have difficulty proving clinical efficacy for a variety of reasons. First, there is an increasing rate of placebo response in all types of trials in psychiatry (Khan, 2002). This may be due to the fact that patients who are recruited in trial are not severely ill (if only because physicians think that severely ill patients will not tolerate a placebo or no-treatment run-in period and will tend to start treatment with a known drug immediately in such case). Also, statistical comparison between the active and placebo groups is flawed by the assumption that patients randomized to the placebo group will deteriorate or at least not improve; this assumption ignores the tendency of acute episodes to remit. This factor has ruined some posttraumatic stress disorder (PTSD) trials: patients with PTSD will tend to improve spontaneously in the first year, even without drug treatment.

Current protocols recruit large cohorts of patients, usually in multicenter studies. Large numbers are needed to ensure statistical power, particularly if the clinical group is very heterogeneous. However, large trials conflict with other imperatives, such as the ethical need to reduce the number of patients who are exposed to compounds with potential risks and no certain therapeutic benefit. Also, streamlined trials might allow patients to gain faster access to new drugs (an important factor in cancer therapy).

Regulatory agencies, which seek both innovative drugs and the reduction of treatment side effects, are aware of the current problems of drug development. Several solutions have been proposed to overcome these problems, such as the emphasis on "proof of concept" studies, and the development of animal and human models of illness.

Proof of concept and early decision

In the last few years, the notion of proof of concept (POC), or proof of principles, has occupied a key position in drug development. POC derives from the paramount need of proving efficacy, as mentioned earlier. In addition, arriving at an early decision is of paramount importance. Accordingly, POC can be defined as the need to demonstrate that the drug effectively does what it is supposed to do, at an early stage of development, before costly patient studies are launched. Although POC should intervene as early as possible, it has been envisaged at various stages of drug development. For instance, there is a preclinical POC at the stage of animal studies; a specific POC in healthy control studies that, as in animal studies, is largely based on the use of models; finally, a POC in patient studies, where the disorder takes the place of models, and "biomarkers" may be collected to validate diagnosis and clinical course.

The early stages of clinical development are critical for the future fate of a putative psychotropic compound. Phase 1 studies constitute a pivotal step in drug development. Their function is to gather enough information to warrant the scientific value of phase 2 studies. The information to be collected includes pharmacokinetics, safety and tolerability, and seeking the maximal tolerated dose, which will be the basis for the choice of doses in subsequent patient studies. Classically, POC studies were conducted in patients. However, patient studies are fraught with difficulties, as discussed earlier. Psychiatric disorders are highly heterogeneous syndromes, and comorbidity is frequent in certain disorders (for instance, comorbid major depression complicates the analysis of drug trials in posttraumatic stress disorder). Homogeneous patient groups are difficult to recruit. Because of these difficulties, there has been an endeavor to conduct more POC studies in healthy controls. Healthy controls are easier to recruit, and they can be more homogeneous as a group if strict selection criteria are applied. However, healthy con-

trols are (by definition) not ill and the only way to establish the clinical efficacy of a compound is to use a model of the illness.

Animal and human models

Animal models are easier to use than human models. Several good animal models can approach human disorders. Lipska et al (2002) have shown in a series of studies that neonatal excitotoxic lesions of the rat ventral hippocampus may serve as a heuristic model of schizophrenia. This model has confirmed the plausibility of neurodevelopmental damage having selected deleterious effects after a prolonged period of relative normalcy. Also, this model mimics aspects of psychostimulant sensitization. Stress-induced anhedonia in rats represents an original model of some aspects of human depression, offering convergent elements of biological, symptomatic, etiological, and therapeutic validity (Moreau, 1998). Obviously, animal models have limits. The rat cannot verbalize depressed affects.

Therefore, researchers have attempted to develop human models for routine use in drug development (Gilles, 2002). A well-established model for Alzheimer's disease is the scopolamine model. The scopolamine model is based on the evidence of alterations of cholinergic transmission in Alzheimer's disease. Scopolamine, a muscarinic blocker, induces cognitive symptoms in healthy volunteers. This model has been used over the last decade to test several cognition-enhancing compounds (Wesnes, 1990). Panic attacks have been modeled with the use of CCK-4 (cholecystokinin tetrapeptide). A CCK-4 injection produces panic-like symptoms in healthy volunteers. These panic-like feelings are prevented by a variety of drugs, including lorazepam, propranolol, and vigabatrin. A possible human model for depression is the tryptophan depletion challenge. Tryptophan is an essential amino acid, meaning that humans cannot synthesize it and must obtain it from their diet; importantly, it is used to manufacture the neurotransmitter serotonin. Tryptophan depletion in healthy volunteers can elicit the neuroendocrine response to serotonergic challenge observed in depressed patients (ie, blunted prolactin response to a serontonergic agonist). The ketamine model is recognized as a good model of schizophrenia, maybe even as the most valid model in man. Ketamine induces symptoms in healthy and schizophrenic volunteers (Newcomer, 1999; Lahti, 2001). Clozapine blunts ketamine-induced psychotic symptoms in schizophrenic patients (Malhotra, 1997). The ketamine model in man parallels the use of PCP in animals. It has been shown that PCP induces EEG changes in the rat, and that clozapine partially antagonizes these effects (Sebban, 2002). This suggests that the effects of PCP on EEG in rats can be used as a model that may be transposable to man.

Conclusion

There is a pressing need to change the classical methodology of clinical trials in mental disorders. However, we should

always keep in mind that successful drug development is not the end (Lebowitz, 2000). Medications are important and necessary, but they do not constitute the total approach to long-term care necessary for people with complex mental disorders.

Bibliography

1. Delay J, Deniker P, Harl JM. Utilisation en thérapeutique psychiatrique d'une phénothiazine d'action centrale élective (4560RP). *Ann Méd Psychol.1952;110:112-117.*
2. Frankle WG, Laruelle M. Neuroreceptor imaging in psychiatric disorders. *Ann Nucl Med*. 2002;16:437-446.
3. Gilles C, Schunk T, Erb G, et al. Human models as tools in the development of psychotropic drugs. *Dialogues Clin Neurosci*. 2002;4:377-387.
4. Heinz A, Jones DW, Raedler T, Coppola R, Knable MB, Weinberger DR. Neuropharmacological studies with SPECT in neuropsychiatric disorders. *Nucl Med Biol*. 2000;27:677-682.
5. Khan A, Leventhal RM, Khan S, Brown WA. Severity of depression and response to antidepressants and placebo: an analysis of the Food and Drug Administration database. *J Clin Psychopharmacol*. 2002;22:1-6.
6. Lahti AC, Weiler MA, Michaelidis T, Parwani T, Tamminga CA. Effects of ketamine in normal and schizophrenic volunteers. *Neuropsychopharmacology*. 2001;25:455-467.
7. Lebowitz BD. A public health approach to clinical therapeutics in psychiatry: directions for new research. *Dialogues Clin Neurosci*. 2000;2:309-314.
8. Lipska BK, Aultman JM, Verma A, Weinberger DR, Moghaddam B. Neonatal damage of the ventral hippocampus impairs working memory in the rat. *Neuropsychopharmacology*. 2002;27:47-54.
9. Malhotra AK, Adler CM, Kennison SD, Elman I, Pickar D, Breier A. Clozapine blunts *N*-methyl D-aspartate antagonist-induced psychosis: a study with ketamine. *Biol Psychiatry*. 1997;42:664-668.
10. Moreau JL, Jenck F, Martin JR. Simulation of a core symptom of human depression in rats. *Curr Topics Pharmacol*. 1998;4:37-50.
11. Newcomer JW, Farber NB, Jevtovic-Todorovic V, et al. Ketamine-induced NMDA receptor hypofunction as a model of memory impairment and psychosis. *Neuropsychopharmacology*. 1999;20:106-118.
12. Paul S. Drug discovery in the 21st century. From genomics to combinatorial chemistry and back. *Br J Psychiatry Suppl*. 1999;37:23-25.
13. Sebban C, Tesolin-Decros S, Ciprian-Ollivier J, Perret L, Spedding M. Effects of phencyclidine (PCP) and MK801 on the EEGq in the prefrontal cortex of the conscious rats; antagonism by clozapine, and antagonists of AMPA-, alpha(1)- and 5-HT(2A)-receptors. *Br J Pharmacol*. 2002;135:65-78.
14. Staner L, Luthringer R, Macher JP. Effects of antidepressant drugs on sleep EEG in patients with major depression. Mechanisms and therapeutic implications. *CNS Drugs*. 1999;11:49-60.
15. Wesnes K, Anand R, Simpson R, Christmas L. The use of a scopolamine model to study the potential nootropic effects of aniracetam and piracetam in healthy volunteers. *Int J Geriatr Psychiatry*. 1990;6:95-102.

Marc-Antoine Crocq, Centre Hospitalier, 27 rue du 4e RSM, BP 276, 68250 Rouffach, France
E-mail: MACrocq@aol.com

Special population sectors

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Advances in child and adolescent psychiatry

Barry Nurcombe
Section on Child and Adolescent Psychiatry, World Psychiatric Association

Risk and resilience

At the forefront of recent advances is research that makes elegant use of longitudinal and twin studies to examine the interaction of genetic and environmental factors.

For example, Caspi et al (2002) have found that a functional polymorphism in the gene encoding for the neurotransmitter-metabolizing enzyme MAOA protects against the development of antisocial behavior in maltreated children. Caspi et al (2003) have also found that a functional polymorphism in the promoter region of the serotonin transporter gene 5-HTT, moderates the influence of life stress on depression.

The Dunedin longitudinal study has demonstrated a continuity between children's behavioral styles and adult personality: undercontrolled children are more likely to exhibit antisocial behavior in adulthood whereas inhibited children are more prone to depression. It is apparent that most adult psychiatric disorders are extensions of juvenile disorders. An impulsive temperament is more likely to be associated with juvenile offending if the neighborhood context is adverse. Children who live with antisocial fathers are more likely to exhibit conduct problems than are children whose antisocial fathers are not living in the home. Exposure to domestic violence is associated with suppression of IQ in a dose-response relationship. Domestic violence is associated with both internalizing and externalizing problems in children. Physical maltreatment predicts antisocial behavior to a degree beyond genetic effects alone. Compared to adolescent-onset delinquency, childhood-onset delinquency is more likely to be associated with inadequate parenting, neurocognitive problems, undercontrolled temperament, childhood hyperactivity, and with later psychopathy and adult violence. Juvenile-onset major depressive disorder (MDD) compared to adult-onset major depression, is more likely to be associated with perinatal insults, motor skills deficits, caretaker instabili-

ty, and family criminality and psychopathology. Juvenile-onset MDD may be etiologically distinct from adult-onset MDD. Delusional ideas and hallucinations experienced at 11 years of age predict a schizophreniform diagnosis in adulthood.

The Christchurch longitudinal study (Fergusson and Horwood, 2001) has studied the stability and continuity of psychopathology, risk and etiological factors, and the psychosocial consequences of mental health problems in adolescence. For example, gay, lesbian and bisexual youth are at increased risk of major depression, anxiety disorder, substance abuse, and suicidal behavior. Children exposed to high levels of domestic violence are at increased risk of mental health problems, substance abuse, and antisocial behavior. Childhood sexual abuse is associated with high levels of interparental conflict, parental psychopathology, and impaired parenting. Sexual abuse predicts major depression, anxiety disorder, conduct disorder, substance abuse, and suicidal behavior, even when allowance is made for confounding factors. Children exposed to sexual abuse are more likely to exhibit early-onset sexual activity. Heavy cannabis use in adolescence is associated with an increased risk of dropping out of secondary or tertiary education without qualifications; however, this phenomenon probably reflects the social context of cannabis use rather than a direct effect of cannabis on cognition or motivation. In a longitudinal study of childhood head injury before the age of 10 years, after controlling for confounding factors, it was found that most cases of mild head injury had no adverse effects, but injuries of mild-to-moderate severity in preschool children were associated with hyperactivity/inattention and conduct disorder.

Genetics and behavioral genomics

Leckman and Mays (1998) are critical of the categorical basis of DSM-IV: a dimensional approach conforms more closely to clinical reality. Todd (2001) contends that many psychiatric disorders are extremes of continua. The phenotypes of mental disorder are due to the failure of conserved neurobehavioral systems to develop normally, or to the dysregulation or cooptation of conserved systems. Obsessive-compulsive disorder, for example, may be the consequence of dysregulation of conserved neural systems evolved to detect, appraise, and respond to threat. Obsessive-compulsive behavior can be factored into four symptom dimensions (checking, ordering, washing, hoarding).

Hoarding involves hyperactive circuits in the orbito-frontal cortex, anterior angulate gyrus and insula, caudate nucleus, ventral striatum, and thalamus. Candidate genes for hoarding behavior have been located at 4q34-35, 5q35.2-35.3, and 17q25. A gene for ordering behavior has been located at 22q. However, for each proposed vulnerability mechanism, the environment has played or is playing a crucial epigenetic role.

The multiple genes conveying susceptibility to schizophrenia appear to operate through different aspects of cortical development, plasticity, and functioning. Schizophrenia has greater penetrance at the level of cortical synaptic functioning than it does at the level of clinical diagnosis.

Research into autism points to microdeletins at chromosome 71p4.18, chromosome duplication on 15q, and other candidate loci on 3q and 17q. Microdeletions have also been posited at Xp22.3 and Xq13-21. Rett disorder has been found to be due to the mutation of a gene at Xq28, methyl CpG binding protein 2, which normally regulates gene expression. Williams syndrome is due to the deletion of a segment of chromosome 7 at the loci for elastin and LIM kinase 1. Fragile X syndrome is caused by a triplet-repeat-expansion defect in the *FMR-1* gene, resulting in an abnormality of RNA metabolism. Prader-Willi and Angelmann syndromes are both caused by a microdeletion at 15q11-13, depending on whether the defect is conveyed by the paternal or the maternal chromosomes; but about 30% of cases are related to uniparental disomy.

Attention deficit hyperactivity disorder is highly heritable. Linkage studies have posited abnormalities in the *DRD4 VNTR 7R*, *DAT 1 VNTR 480*, *DRD5* 148 bp, and *DBH OR 1.33* alleles, in the glial-cell-derived neurotrophic factor gene, and in the glial high-affinity-glutomate receptor on 5p, serotonin system genes on 6q14, and the serotonin transporter gene at 17p11. ADHD may be constituted by multiple genetically independent forms. Linkage studies have discovered an association between reading disorder and chromosomes 6p21 and 15q21. Tourette's syndrome is primarily an inherited disorder, possibly the result of a single major gene with additive effects combined with other genetic and environmental factors. One environmental factor may be streptococcal infection.

Advances in pharmacogenetics have associated the ultrarapid metabolization of and failure to respond to fluoxetine, paroxetine, and tricyclics with the *2D6* gene on chromosome 22. Other genes involved in the metabolism of psychotropic drugs are *1A2*, *2C19*, *5HTTR*, *COMT*, and *TPH*.

Developmental psychopathology

Cognitive-behavioral researchers were the first to promote standardized manualized treatment with close attention to client motivation, the maintenance of treatment fidelity, and outcome measurement. During the last 5 years, the chief advance has been in the controlled testing and refinement of treatment models, and a greater sensitivity to developmental differences.

Attachment theorists (eg, Thomson, 2000) have advanced the concept of working models of attachment derived from early attachment relationships that form during early childhood and act as templates for later social relationships.

Child maltreatment is associated with disorganized attachment. Insecure attachment can be reversed by intervention that improves the quality of maternal care, and by later developmental influences.

Piaget's theory of the construction of knowledge following assimilation and accommodation is generally accepted. However, his concept of logico-mathematical structures has been superseded by the concept of domain-specific structures derived from the human environment (eg, the recognition of facial emotion and language). Vygotsky's theory of inner speech and metacognition has stimulated much contemporary research, particularly into the effect of adult-child language interaction on the child's cognitive development. Nelson (1996) describes the child as first building situational models, then mental event representations via participatory language interaction and collaborative constructionism. Neopiagetians describe three domains of central conceptual structure: mathematical, spatial, and social. At the age of 5 years the child merges the knowledge that events affect mental states and the understanding of familiar events (scripts). Parental empathy is essential for the child's socioemotional development. Social perspective-taking, emotional understanding, and moral reasoning are deficient in autism, for predominantly biological reasons, but they are also impaired in conduct disorder as a result of gene-environment interaction. The capacity for shared attention is lacking in autism, leading to a deficient "theory of mind" (Baron-Cohen et al, 2000).
Temperament is substantially genetically determined. Extremes of temperament such as behavioral inhibition or behavioral under control are apparent early in development, and appear to be derived from high or low sympathetic reactivity originating in brain stem activity. Behavioral inhibition predicts social anxiety; however only 30% of inhibited children develop psychiatric disorder. Difficult early temperament (negative mood, slow adaptation, irregular rhythms, withdrawal, high intensity) can lead to later behavior disorder if the parent fails to cope with it.

Psychiatric disorders

Different studies have demonstrated neuromorphometric differences in ADHD, Tourette's disorder, autism, learning disorders, early-onset affective disorder, obsessive compulsive disorder, and pediatric autoimmune neuropsychiatric disorders. In view of the fact that different causes may result in a single behavioral phenotype, researchers are searching for indicators more directly related to genetic and environmental causation, and to neurodevelopmental or neurodegenerative processes.

The concept of juvenile-onset bipolar disorder remains controversial. Juvenile-onset bipolar disorder is highly comorbid with disruptive behavior disorder and has been described as associated with high levels of rapid cycling, irritability, aggressiveness, and impulsivity. Whether this condition is co-terminous with classic mania is unclear. The Oregon Adolescent Depression project found no cases of

rapid cycling and only 0.002% of cases with onset less than 10 years. Adolescents with bipolar disorder tend to have a chronic course. There is some support for the concept of a bipolar spectrum. Subthreshold bipolar disorder in childhood predicts adult depression. The risk of depressive disorder is increased in adults who were depressed as adolescents, though not as children. Major depressive disorder is associated with increased social and psychiatric morbidity, and, in 5-10%, recurrence or chronicity.

Anorexia nervosa and bulimia nervosa overlap but are essentially independent of each other. The families of eating-disordered patients have a broad spectrum of eating pathology. The heritability of eating disorder is low in prepubertal twins but high in 17-year-old twins. Bulimia nervosa is highly comorbid. Previous physical or sexual abuse may be predisposing factors for bulimia. Early adolescent anorexia nervosa responds best to behavioral family systems therapy. Hospitalization is ineffective unless the patient attains ideal body weight before discharge. Bulimia nervosa responds best to intensive cognitive behavioral therapy. Childhood obesity is related to polygenic and shared lifestyle factors. Comprehensive behavioral treatment programs are the most effective in treating childhood obesity.

It is evident that long-term child abuse can have a lasting effect on brain development and functioning, particularly in regard to the hippocampus, frontal cortex, amygdala, and hypothalamic-pituitary-adrenal axis. Dissociation is commonly associated with complex posttraumatic stress disorder, particularly after serious child abuse. Dissociative symptoms are common in delinquent juveniles who have been traumatized by maltreatment and community violence. Little research has been published concerning the treatment of dissociative disorders in childhood. Clinicians who use pharmacotherapy in such cases do so without the benefit of empirical, controlled studies.

Attention deficit hyperactivity disorder is a heterogeneous phenotype, at the convergence of a number of causal pathways: genetic factors, antenatal and perinatal insults, chemical toxins, social stressors, neuromorphometric abnormalities, and interactions between these factors. The concept of conduct disorder is falling apart as researchers examine the differences between early-onset and adolescent-limited delinquency, and continua involving reactive and instrumental aggression, oppositionalism and rule-breaking, callousness and empathy, impulsivity, aggressiveness, attention deficit, and learning problems.

Treatment

Extensive clinical trials have been conducted for the psychotherapy of anxiety disorders, depression, attention deficit disorder, and conduct disorder. Effective treatments are both numerous and diverse; Weisz et al (2004) identified 326 controlled research programs for which there was empirical support.

Papadopoulos et al (2004) have reviewed RCT studies of the effectiveness of stimulant, antidepressant, antianxiety, mood-stabilizing, antipsychotic, and other medications in ADHD, and in mood, anxiety, bipolar, psychotic, and conduct disorders. There is a need for studies that balance therapeutic effectiveness against side effects and safety.

Therapeutic foster care and multi-systemic therapy are effective in the treatment of conduct-disordered adolescents. Case management, "wrap-around," and school-based services are promising but unproven. Greater attention is being directed to promoting the treatment alliance in order to overcome barriers to help-seeking.

In short, there has been a radical shift away from non-empirical practice toward therapies that are evidence-based.

Bibliography

1. Baron-Cohen S, Tager-Flusberg H, Cohen D. *Understanding Other Minds: Perspectives from Cognitive Developmental Neuroscience*. 2nd ed. Oxford, UK: Oxford University Press; 2000.
2. Carlson GA, Kashani JH. Mood disorders. *Child Adoles Psychiatr Clin N Am*. 2002;11:443-672.
3. Caspi A, Sugden K, Moffitt TE, et al. Influence of life stress on depression: moderation by a polymorphism in the *5HTT* gene. *Science*. 2003;301:386-389.
4. Caspi A, McClay J, Moffitt TE, et al. Role of genotype in the cycle of violence in maltreated children. *Science*. 2002;297:851-854.
5. Ferguson DM, Horwood LJ. The Christchurch Health and Development Study: review of findings on child and adolescent mental health. *Austr N Z Psychiatry*. 2001;35:287-296.
6. Laor N, Wolmer L, eds. Eating disorders. *Child Adoles Psychiatr Clin N Am.* 2003;12:171-382.
7. Leckman JF, Mayes LC. Understanding developmental psychopathology: how useful are evolutionary perspectives? *J Am Acad Child and Adoles Psychiatry*. 1998;37:1011-1021.
8. Nelson K. *Language in Cognitive Development: The Emergence of the Mediated Mind*. Cambridge, UK: Cambridge University Press; 1996.
9. Pappadopulos EA, Guelzow BT, Wong C, Ortega M, Jensen PS. A review of the growing evidence base for pediatric psychopharmacology. In: Burns BJ, Hoagwood KE, eds. Evidence-based practice, Part I: research update. *Child Adoles Psychiatr Clin N Am*. 2004;13:817-856.
10. Robb AS, ed. Eating disorders. *Child Adoles Psychiatr Clin N Am*. 2002;11:163-428.
11. Stubbe DE, ed. Attention-deficit/hyperactivity disorder. *Child Adoles Psychiatr Clin N Am*. 2000;9:469-726.
12. Thompson RA. The legacy of early attachments. *Child Dev*. 2000;71:145-152.

13. Todd RD, ed. Genetic contributions to early-onset psychopathology. *Child Adoles Psychiatr Clin N Am*. 2001;10:209-290.
14. Weisz JR, Hawley KM, Doss AJ. Empirically tested psychotherapies for youth internalizing and externalizing problems and disorders. In: Burns BJ, Hoagwood KE, eds. Evidence-based Practice, Part I: Research Update, *Child Adoles Psychiatr Clin N Am*. 2004;13:729-816.

Barry Nurcombe, Professor Emeritus in Child & Adolescent Psychiatry, The University of Queensland, 49 Highview Terrace,St Lucia, Brisbane, Queensland 4067, Australia
E-mail: bnurcombe@psychiatry.uq.edu.au

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Advances in women's mental health

Donna E. Stewart, Mona J. Khalid
Section on Women's Mental Health, World Psychiatric Association

The choice of the most important advances that have occurred during the last 3 years in women's mental health has not been easy. We were in these decisions by informal surveys of members of the WPA Section of Women's Mental Health, the International Association of Women's Mental Health, and the American Psychiatric Association Women's Caucus. Although many topics were suggested, there was fairly good consensus that the major impact had been in three main areas: (1) our understanding of why women have higher depression and anxiety prevalence rates than men; (2) the use of psychotropic drugs in pregnancy and lactation; and (3) research on menopause, depression, and hormones.

Why depression and anxiety prevalence rates are higher in women than men

Repeated epidemiological studies throughout the world show that depression and anxiety prevalence rates are approximately 2:1 for women to men. Etiologic hypotheses about this female predominance have focused on four main variables: hormones, psychological factors, genetics, and environment.

As prevalence rates of depression and anxiety are approximately equal in boys and girls until puberty, it has been hypothesized for decades that the onset of menstruation in girls, triggered by increases in estrogen and other female gonadal hormones, may be responsible for increased depression and anxiety rates. Paradoxically, sudden decreases in estrogen levels at other times of life, such as postpartum and menopause, are also accompanied by increased rates of depression and anxiety; thereby suggesting that it may be hormone ratios or changes, rather than absolute levels, which trigger depression and anxiety in vulnerable women.

Psychosocial factors are also clearly important in the etiology of depression and anxiety. Young women are expected to be slim, sexual, nurturing, and compliant, while at the same time, achieve

social gracefulness, maturity, and academic success. For several years, it has been known that learned helplessness and ruminative cognitive styles are highly associated with depression in women.

Earlier controversies about whether nature or nurture caused mental disorders have been replaced by greater understanding that both genes and environment interact to produce behavioral phenotypes (Tsuang et al, 2004). Gene-environment interactions occur when environmental influences on a trait differ according to the person's genetic predisposition, or when a person's genetic predisposition is expressed differently in different environments. Indeed, even environment itself maybe influenced by genes! Groundbreaking research by Kendler and colleagues during the 1990s used large population-based twin studies to study the impact of life events on depression and anxiety in women. Studies looking at the comorbidity of generalized anxiety disorder and major depression in female twins found that all of the genes that influenced lifetime risk for these disorders appeared to be completely shared; however, environmental factors appeared to be largely responsible for whether a female expressed generic vulnerability as either anxiety or depression. Following these results, Kendler and colleagues set out to investigate the relationship between stressful life events and the onset of depression in their twins. They found that the risk of onset of a major depressive episode was high in the month following the occurrence of four types of severe life events (death of a close relative, assault, divorce or marriage breakup). These results indicated a gene-environment effect in which genetic susceptibility increased an individual's sensitivity to the psychological impact of stressful life events.

A review and a novel series of studies by Nemeroff and colleagues shed important light on the effects of early abuse and neglect on later vulnerability to depression in women. The first paper was a review of preclinical research on the adverse impact of parental depression on the development of offspring (Newport et al, 2002). The authors reviewed papers from the past 40 years on laboratory animal studies pertaining to the persistent effects of parental stress and parenting deficits on neurobehavioral and neurobiological development in offspring. Animal studies showed that disrupted parenting produced a persistent deleterious biobehavioral impact on offspring. Stressors included maternal separation, variable foraging and a variety of prenatal maternal challenges, and they produced offspring behaviors reminiscent of anxiety and affective disorders in humans. The stress paradigm also produced persistent hyperresponsitivity of the HPA axis secondary to hypersecretion of corticotrophin-releasing hormone. These findings have striking similarities to biological findings for stress-related illnesses in humans, including major depression (Newport et al, 2002).

A follow-up study by Heim et al (2002) from this group sought to evaluate the relative role of early adverse experiences versus adult stress experiences in the prediction of neuroendocrine stress reactivity in women. They studied 49 women (normal volunteers, depressed patients, or women with a history of early abuse) who underwent a battery of interviews and completed dimensional rating scales associated with a psychosocial laboratory stressor. Outcome measures were plasma adrenocorticotropin (ACTH) and cortisol responses to a stress test. They found that peak ACTH and cortisol responses to psychosocial stress were predicted by a history of childhood abuse, the number of separate abuse events, the number of adulthood traumas and the severity of depression. Clearly, the interaction of childhood abuse and adulthood trauma was the most powerful predictor of ACTH responsiveness. These findings suggested that a history of childhood abuse per se was related to increased neuroendocrine stress reactivity, which was further enhanced when additional trauma was experienced in adulthood. Penza et al (2003) from the Nemeroff group, suggested a stress diathesis model in which early adverse events resulted in a sensitized stress axis that predisposed individuals to develop mood disorders in later life. They hypothesized that specific early life traumatic events occurring during a period of neuronal plasticity might render the neuroendocrine stress response systems supersensitive. These physiologic maladaptations might then produce long-term risk factors for the development of psychopathology after exposure to additional stress. More promisingly, identification of the neurobiological substrates that are affected by adverse experiences in early life may then lead to the development of more effective treatments for depression and anxiety disorders (Nemeroff, 2004).

Neuroimaging studies using positron emission tomography after a psychosocial stress task were used to investigate dopamine release in response to stress in human subjects who had early life deficient parental care (Pruessner et al, 2004). The investigators found that adverse stressful events can be associated with mesolimbic dopamine release in humans with low parental care and that this method may be useful to study the effects of early life events on neurobiological stress systems.

Another neuroimaging study using magnetic resonance imaging by Teicher et al (2004) looked at deprivation in the parent-child relationship and whether it had an enduring impact on brain development. The researchers reported on 51 psychiatric patients who either were or were not neglected or physically or sexually abused, in comparison to healthy controls. Fifteen of the psychiatric patients had definite or probable histories of sexual abuse, 18 had physical abuse histories and 20 had neglect histories. Rates of serious mood disorders, suicidality and disruptive behavior were not significantly different between abused or neglected inpatients and inpatients without neglect or abuse.

However, total corpus callosum size was significantly smaller in the abused or neglected group than in the controls or non-abused/non-neglected groups. As myelination continues throughout childhood, neglect may reduce myelination. Reduced maturation of the corpus callosum could play a role in abnormalities of cerebral lateralization reported in some psychiatric disorders.

New studies by Pryce et al (2004) on the neurobiology of early deprivation of animals have also recently been published which provide additional evidence for the deleterious effects of early stress. Early deprivation of marmoset monkeys resulted in higher mean resting urinary norepinephrine levels and elevated mean systolic blood pressures compared with control animals.

Clinical studies also illustrate the tendency of early childhood abuse to predispose toward mental disorders and pathological behaviors. Gladstone et al (2004) interviewed 125 women with depressive disorders who also completed self-report questionnaires. Path analysis was used to examine relationships in childhood and personality variables with deliberate self-harm in adulthood and recent interpersonal violence. The investigators found that women with a childhood sexual abuse history reported more childhood physical abuse, childhood emotional abuse and parental conflict in the home compared to women without a childhood sexual abuse history. The two groups were similar in the severity of depression, but the women with childhood sexual abuse were more likely to have attempted suicide or engaged in deliberate self-harm. They also became depressed earlier in life, were more likely to have had panic disorder and were more likely to report a recent assault. Investigators concluded that depressed women with childhood sexual abuse history constitute a subgroup of patients who may require tailored interventions to combat depression recurrence and harmful and self-defeating coping strategies.

These studies, taken as a whole, indicate that early life traumas (neglect, physical abuse, and sexual abuse), as well as those that occur later in life, predispose to depression and anxiety in adults, particularly women. As women, compared to men, are more likely to have sexual abuse histories, these recent studies may help to explain some reasons for higher rates of depression and anxiety in adolescent and adult women.

Antidepressants in pregnancy and lactation

Over the past decade an increasing number of studies on teratogenicity have led to greater confidence in prescribing antidepressant drugs to depressed women during pregnancy and lactation. Recent concerns, however, over the safety of SSRI antidepressant drugs in children, have led to increased scrutiny of their safety in pregnant and lactating women. Earlier studies of depressed pregnant women taking antidepressants found no deleterious effects in infants, in terms of length of gestation, birth weight, Apgar

score, neonatal weight gain, major teratogenic abnormalities or developmental tasks. Studies of antidepressant use in depressed lactating women found only small amounts of antidepressant in the infant serum and no, or minor behavioral changes, in nursing infants. More recent studies by Zeskind and Stephens (2004) and behavioral pediatricians, have noted more motor activity, tremulousness, and REM sleep; fewer rhythms in heart rate variability, fewer changes in behavioral state, and fewer different behavioral states and lower peak behavioral rate in infants whose mothers were taking SSRI antidepressants in late pregnancy. Animal studies involving administration of fluoxetine to newborn mice, showed reduced ability in maze testing, poor eating, slow escape behaviors and other signs of anxiety and depression when they reached adulthood (Ansorge et al, 2004). These studies have led to warnings by various regulatory authorities and call for more and better studies on the safety of SSRIs during pregnancy and lactation. Meanwhile, clinicians must be guided by weighing the substantial risks of untreated maternal depression against the poorly defined possible risks of prescribing antidepressant drugs to infants, children, and women.

Menopause, mood, and gonadal hormones

Menopause is a normal life stage and transition, which most women traverse, with little or no difficulty. Many welcome the cessation of menstruation and unwanted pregnancies, looking forward to new opportunities with enthusiasm, described as postmenopausal zest. However, the notion that women become irritable and depressed at menopause, has long prevailed among clinicians and women. Although population data shows that the menopausal years are not associated with an increase in depression for most women, there appears to be a small subset of women who are especially vulnerable to depression at this time of life. These are women with a history of depression, currently experiencing severe psychosocial stress and fluctuating symptom severity, associated with shifts in gonadal hormone (Freeman et al, 2004).

The psychosocial context of middle-aged women's lives greatly affects their adaptation to the biological changes of perimenopause. Most studies show that the psychosocial context of menopause may have a greater effect on symptomatology than any biological changes and caution against an overly reductionist hormonal approach to mood or cognitive symptoms.

Estrogen receptors are present in almost all tissues of the body and play an important role throughout the life span. Estrogen receptors are particularly plentiful in the brain, especially in the hypothalamus, medulla and limbic system. It is, accordingly, not surprising that sudden changes in estrogen levels, such as those at perimenopause, may affect mood, anxiety and cognition.

For several years there has been great interest in the use of estrogen to treat

perimenopausal depression, anxiety, and cognitive changes. Estrogen's role in regulating neurotropic, neurotransmitter factors and neuropeptides may explain its impact on vasomotor, mood, and cognition symptoms in perimenopausal women. Double-blind, placebo-controlled studies have shown significant antidepressant benefit with the use of transdermal estradiol in some perimenopausal women suffering from major depressive disorder, dysthymia, or minor depression (Schmidt et al, 2000; Soares et al, 2001). The antidepressant benefit, after a 4-week washout period, despite the re-emergence of vasomotor symptoms suggests the existence of an independent effect of estradiol on vasomotor symptoms. Previous studies, using oral conjugated estrogen, showed negative therapeutic results, suggesting that the route of administration may be important. Other studies have attempted to show the efficacy of estrogen as an adjunctive treatment in depressed perimenopausal or postmenopausal women on SSRIs. In general, perimenopausal compared to postmenopausal women, appear to respond more favorably to estrogen. The concomitant use of hormone therapy may maximize the benefits obtained with SSRIs in perimenopausal women. An antidepressant medication should be tried first in perimenopausal women who have major depressive disorder. In those women who remain unresponsive to antidepressant treatment, augmentation with a small dose of estrogen at the lowest dose, for the shortest time possible, is a reasonable option.

Other hormones have also been studied for their effects during perimenopause. Progesterone appears to have a negative effect on mood, mainly as a result of increased irritability and dysphoria. Androgens, including testosterone and androstenedione, are produced in women by the adrenal glands and ovaries, and are reputed to have neuroprotective properties. Androstenediones are currently under study for the treatment of mood and cognitive decline in perimenopausal women. The new selective estrogen receptor modulators (SERMs) are also being studied for their effects on mood and cognition but to date, have shown minimal effects.

For years, women and their health care providers were exhorted to use exogenous estrogen replacement therapy to treat a variety of menopausal mood and cognitive symptoms. Estrogens and progesterones were lauded for their protective effects on the cardiovascular system, bone density, general well-being, and the treatment of acute perimenopausal symptoms, such as vasomotor flashes. The Women's Health Initiative (WHI), a landmark primary prevention trial, randomly assigned over 6000 postmenopausal women aged 50 to 79 to receive estrogen plus progesterone, or placebo. The primary outcome measure was coronary heart disease, with invasive breast cancer as a primary adverse outcome. In May 2002, after a mean of 5.2 years of follow-up, the trial was stopped by the Data Safety Monitoring Board. The overall health deleterious effects, associated with com-

bined estrogen and progesterone, exceeded the benefits. In general, there were more strokes, coronary heart disease, invasive breast cancer and pulmonary emboli per 10 000 person years in the hormone group (The Writing Group for the WHI, 2002). In February 2004, the estrogen only arm of the WHI, was also stopped (Anderson et al, 2004). Results of the WHI study also showed no beneficial effects on quality of life, including questions on general health, vitality, mental health, depressive symptoms and sexual satisfaction at 3 years. The Women's Health Initiative Memory Study (WHIMS) was conducted on a subgroup of WHI women, 65 years or older, to assess the incidence of dementia or mild cognitive impairment in women treated with estrogen and progestins. Four years after randomization, there was increased risk for probable dementia, seen among women using estrogen plus progestins, as compared with placebo (Shumaker et al, 2004). There was also no significant improvement in cognitive function among hormone users compared to placebo.

The results of the WHI surprised many physicians and their patients, leaving unanswered questions about the best management of various conditions, including depression, in midlife women.

In general, these studies on menopause, again, show the importance of randomized controlled trials in evaluating treatment of women's mental health problems. The genetic and environment studies, are a welcome move away from unifactorial explanations, towards studying the interactions of environmental and biological variables. The promise of new scientific methods including genetics, neuroimaging, hormones, psychology and social sciences continue to have a vital impact on our better understanding and treatment of mental disorders in women.

Bibliography

1. Anderson GL, Limacher M, Assaf AR, et al. Effects of conjugated equine estrogen in postmenopausal women with hysterectomy: the Women's Health Initiative randomized controlled trial. *JAMA*. 2004;291:1701-1712.
2. Ansorge MS, Zhou M, Lira A, Hen R, Gingrich JA. Early-life blockade of the 5-HT transporter alters emotional behavior in adult mice. *Science*. 2004;306:879-881.
3. Freeman EW, Sammel MD, Liu L, et al. Hormones and menopausal status as predictors of depression in women in transition to menopause. *Arch Gen Psychiatry*. 2004;61:62-70.
4. Gladstone GL, Parker GB, Mitchell PB, Malhi GS, Wilhelm K, Austin MP. Implications of childhood trauma for depressed women: an analysis of pathways from childhood sexual abuse to deliberate self-harm and revictimization. *Am J Psychiatry*. 2004;161:1417-1425.
5. Heim CH, Newport DJ, Wagner D, Wilcox MM, Miller AH, Nemeroff CB. The role of early adverse experience and adulthood stress in the prediction of neuroendocrine stress reactivity in women: a multiple regression analysis. *Depress Anxiety*. 2002;15:117-125.

6. Nemeroff CB. Neurobiological consequences of childhood trauma. *J Clin Psychiatry*. 2004);65(suppl 1):18-28.
7. Newport DJ, Stowe ZN, Nemeroff CB. Parental depression: animal models of an adverse life event. *Am J Psychiatry*. 2002;159:1265-1283.
8. Penza KM, Heim C, Nemeroff CB. Neurobiological effects of childhood abuse: implications for the pathophysiology of depression and anxiety. *Arch Women Ment Health*. 2003;6:15-22.
9. Pruessner JC, Champagne F, Meaney MJ, Dagher A. Dopamine release in response to a psychological stress in humans and its relationship to early life maternal care: a positron emission tomography study using [^{11}C] raclopride. *J Neurosci*. 2004;24:2825-2831.
10. Pryce CR, Dettling AC, Spengler M, Schnell CR, Feldon J. Deprivation of parenting disrupts development of homeostatic and reward systems in marmoset monkey offspring. *Biol Psychiatry*. 2004;56:72-79.
11. Schmidt PJ, Nieman L, Danaceau MA, et al. Estrogen replacement in perimenopause-related depression: a preliminary report. *Am J Obstet Gynecol*. 2000;183:414-420.
12. Shumaker SA, Legault C, Kuller L, et al. Conjugated equine estrogens and incidence of probable dementia and mild cognitive impairment in postmenopausal women: Women's Health Initiative Memory Study. *JAMA*. 2004;291:3005-3007.
13. Soares CN, Almeida OP, Joffe H, et al. Efficacy of estradiol for the treatment of depressive disorders in perimenopausal women: a double-blind, randomized, placebo-controlled trial. *Arch Gen Psychiatry*. 2001;58:529-534.
14. Teicher MH, Dumont NL, Ito Y, Vaituzis C, Giedd JN, Andersen SL. Childhood neglect is associated with reduced corpus callosum area. *Biol Psychiatry*. 2004;56:80-85.
15. Tsuag MT, Bar JL, Stone WS, Faraone W. Gene-environment interactions in mental disorders. *World Psychiatry*. 2004;3:73-83.
16. Writing Group for the Women's Health Initiative (WHI) Investigators. Risk and benefits of estrogen plus progestin in healthy postmenopausal women. Principal results from the women's health initiative randomized controlled trial. *JAMA*. 2002;288:321-333.
17. Zeskind PS, Stephens LE. Maternal selective serotonin reuptake inhibitor use during pregnancy and newborn neurobehavior. *Pediatrics*. 2004;113:368-375.

Donna E. Stewart, Professor of Psychiatry, Lillian Love Chair in Women's Health, Toronto General Hospital, 657 University Avenue M/L 2-004, ML-200-4, Toronto, Ontario, Canada M5G ZNZ
E-mail: donna.stewart@uhn.on.ca

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Advances in old age psychiatry

Edmond Chiu, Nori Graham, Cornelius Katona, Nicoletta Tataru
Section of Old Age Psychiatry, World Psychiatric Association

Introduction

The discipline of old age psychiatry makes steady progress in advancing the understanding of and develops treatment for the elderly with mental disorders.

A 2000 word summary can only highlight some areas, reflecting some domains of interest.

This report results from the contributions from some members of the Section Executive Committee:

Dr Nori Graham (UK)
Dr Nicoletta Tataru (Romania)
Prof Cornelius Katona (UK)
Prof Edmond Chiu (Australia) (Chairman)

Developments in training in old age psychiatry

Nori Graham

Despite worldwide demographic changes, with consequent increases in the numbers of elderly mentally ill, the teaching of old age psychiatry is widely neglected. However, in recent years a number of initiatives have helped reveal the current training situation in this specialty and have prepared the way for future positive developments. In 2001, a survey was conducted of the 48 WPA member societies assessing the level of medical education in old age psychiatry in each country (Camus et al, 2003), as well as the perceived needs in educational material. Support for the development of postgraduate education was seen as a priority. Only 13 (27%) of the countries surveyed recognize old age psychiatry as a sub-specialty, although 44 (92%) reported teaching in old age psychiatry at the undergraduate level. The priority was widely seen as the development of postgraduate training.

The recent publication of the first European consensus core curriculum and training guidelines for training in old age psychiatry (Gustafson et al, 2003) was therefore timely. This publication represents the fifth of sixth consensus statements produced by the WPA in

a major initiative inspired by the late Professor Jean Wertheimer of the University of Lausanne, Switzerland. All the consensus statements were produced by the WPA section for old age psychiatry together with the WHO. The multidisciplinary group producing the statement came from a wide range of NGOs representing nurses, social workers, occupational therapists, psychologists, psychiatrists, and national Alzheimer's organizations.

The document on skill-based objectives describes 22 areas of competences and learning objectives. The objectives are designed to be relevant to a broad range of specialists and primary care workers as many countries have no specialists in the field of old age psychiatry or accredited training programs and therefore need material for all levels of service delivery. It is hoped that this curriculum will be a model for other parts of the world apart from Europe. The consensus document recommends that the course should be accompanied by an accreditation system. Such accreditation would be awarded to those who had had a minimum of 1-year whole time equivalent experience in old age psychiatry and had demonstrated competence in the range of skills defined in the curriculum.

It is hoped that the curriculum will form a basis for training courses and attachments in the psychiatry of old age, thus helping European countries to establish at least a small core of specialists to provide leadership in clinical service delivery, training, and research.

An example of development of training in old age psychiatry in Eastern Europe follows.

Towards training for old age psychiatry in Eastern Europe

Nicoleta Tataru

Like in all countries in this part of the world, the discipline of geriatric psychiatry is still being developed. Old age psychiatry (OAP) is recognized as a specialty only in a few Eastern European countries: Czech Republic, Romania (2001), and Turkey.

The number of professionals working in the field is still very low and not enough to meet the needs of care for elderly with mental disorders. In some countries there are national geriatric psychiatry associations, which try to improve this situation through organizing the postgraduate training courses for young doctors.

The first course on psychogeriatrics was organized in Nottingham by the British Council (1980), with participants from over 30 countries. In Romania the first course on geriatric psychiatry was organized in 2000, during the 28th Congress of the EAGP.

The majority of European countries have yet to have accredited training programs in OAP; these programs exist only in UK, Sweden, Belgium, and Romania. It is recommended that all European countries should set up national systems to accredit such supra-specialists.

Training in old age psychiatry should be offered at undergraduate and postgraduate level and also during continuing professional education. The specialty of psychiatry of the elderly requires grounding in general psychiatry and in general geriatric medicine.

The Old Age Psychiatry Section of the World Psychiatric Association and WHO, with the collaboration of several NGOs and the participation of experts from different Regions, also tries to improve the educational situation.

The technical consensus statements established in 1998 offered a basic guide for all those involved in the field of mental health for older persons.

This was followed up by several meetings organized within the EAGP initiative by the WHO Collaborating Centre for OAP to elaborate a core curriculum based on knowledge and skills to define the subspecialty of OAP (WHO 1998; Gustafson et al, 2003; Draper 2003)

International Psychogeriatrics Association (IPA) Eastern Europe Initiative (EEI), IPA Regional Initiatives

In August 1988 IPA convened its first *Eastern Bloc Workshop*, with participants from Hungary, Czechoslovakia, Soviet Union, Bulgaria, and Poland.

In 1995 IPA launched the first initiatives: Latin America and Southeast Asia Initiatives, which work to identify and respond to the psychogeriatric needs of those regions. IPA has a very close continuing collaborative working relationship with the WPA Section.

The IPA EEI

In September 2001, during the IPA Congress in Nice, the first meeting of the EEI took place, followed by the meeting during the IPA Congress in Rome, April 2002.

In April 2003, EEI participated as a Forum organized at IPA Regional Meeting in Geneva with emphasis on mental health services in Eastern Europe; and in August 2003, organized a Symposium during the IPA Congress in Chicago.

It is very important to involve in the educational programs and, in the care of the elderly, not only non-medical professionals (psychologists, nurses, caregivers) but also other doctors (GPs, neurologists, geriatricians, etc).

Background and current activities of IPA EEI

- Need for recognition of OAP in the region.
- Need for national education and training program for professionals and for GPs.
- Need for national program to establish OAP services and other providers services for elderly (NGOS, churches).
- In most of the former communist countries, the state is still the main provider of free medical and social

services; especially psychiatric services are still outside the system of insurance medicine.
- The professionals, like all those in all developing countries, have difficulties to continue medical education after graduation.
- Stigma remains, maybe more than in developed countries. This is a major obstacle in ensuring access to good care for the elderly.

Future activities

- International itinerant courses in: Romania, Poland, Czech Republic, former-Yugoslavia, Turkey, and in some countries of the former Soviet Union.
- Summer courses in Romania, with the participation of the colleagues from EE to obtain certificate for OAP.
- Participation in the national and international congresses.
- Develop specialized OAP services, if it is possible, in all our countries.

Romanian Association of Geriatric Psychiatry activity

The scientific organizations like Romanian Alzheimer Society (1996), Romanian Association of Geriatric Psychiatry (ARG, 1999), Romanian Medical Society of Research of Cognitive Disorders and AD (2001), organize the training courses for young doctors psychiatrists and general practitioners, to improve the care of the elderly.

The training and teaching program comprises:

- Courses for health and social care professionals (GPs, psychiatrists, psychiatry trainees, geriatricians, neurologists, and other doctors, nurses, occupational therapists, social workers) in undergraduate, postgraduate, and continuing education.
- Undergraduate, postgraduate, and continuing education courses for geriatric psychiatrists for obtaining the OAP certificate (1 year).
- Education and information offered to the general public, caregivers, users and voluntary workers using the media.
- ARG organizes together with IPA EE Initiative summer courses for psychiatrists from all EE countries on geriatric psychiatry (Oradea, Romania).
- ARG participates and organizes the itinerant courses in EE countries (Romania 2000, Poland 2003).

The first IPA/ARG Summer Course has just finished. We hope that this intensive 7-day summer course will enhance the young general psychiatrists' professional effectiveness and after this course mental disorders could be better recognized and understood and will be better treated. Our goal is to provide at a high scientific level the basic skills of old age psychiatry to more and more psychiatrists in our part of the world. In spite of the professionals' endeavor in specializing in the teaching and training program, in Romania there exist few psychogeriatric services and less special care services for dementia patients. Improvement in patient outcomes and their quality of life would be the expected outcomes of teaching.

Future needs

In all former communist countries there are economical problems and national fundraising is needed to support the national psychogeriatric organizations, services and educational and training programs.

The emphasis in training psychiatrists to work in the community will vary somewhat according to the resources of the country. In low-level resource countries, most mental health care should be provided in primary care settings with the psychiatrists taking a lead role in training personnel in primary care as well as secondary and tertiary consultation.

Managing behavioral problems in people with dementia: life after atypicals

Cornelius Katona

Behavioral and psychological symptoms of dementia (BPSD) are common in people, particularly in the context of severe cognitive impairment. Such symptoms (which may include agitation, aggression, anxiety, irritability, depression, and restlessness) are distressing to caregivers and may trigger breakdown of care in both community and institutional settings. Atypical antipsychotic drugs have in recent years played a key role in the management of such problems. Their use has recently been strongly discouraged since analyses of industry clinical trial data in dementia patients revealed a substantially increased cardiovascular risk from risperidone or olanzapine compared with placebo. The evidence is less clear (probably reflecting lack of evidence rather than evidence of lack of risk) for other atypicals. The current position has been well summarized by a UK consortium of professional and voluntary groups.

The "positive" aspect of this clear but restrictive advice is that it encourages a critical review of the management of BPSD. This is timely in view of growing concern about the possible overuse of these drugs as a substitute for good quality care.

The first step in appropriate management remains systematic assessment. This should consider triggers for emergent behaviors such as acute physical illness, pain, and inappropriate imposition of care. Assessment of risk associated with the behavior is also critical since this must be balanced against risks of intervention.

Several drug treatments may be considered though there is a remarkable lack of RCT evidence to support their use. "Older" antipsychotics may be considered though their cardiovascular risk profile is unclear and they carry a considerable burden of cognitive, extrapyramidal, and sedative effects. Antidepressants may be useful both for clear-cut depressive or anxiety symptoms and for agitation. The evidence base remains weak but is probably best for SSRIs. Mood stabilizers are frequently used despite the lack of RCT base. Benzodiazepines carry significant risk of ataxia, confusion, and falls but may be useful when other treatment strategies

fail. There is emerging evidence that cholinesterase inhibitors may have beneficial effects on behavioral profile as well as cognition, and in non-Alzheimer dementias (vascular dementia, dementia with Lewy bodies) as well as in Alzheimer's disease.

There is an extensive evidence base for the use of non-drug treatments, which has recently been reviewed by Livingston et al. The best evidence is for cognitive stimulation and for behavioral management techniques focusing on specific behavioral problems. Snoezelen (multi-sensory stimulation) and music therapy also appear to have beneficial though short-term effects.

Psychosis in the elderly

Since the publication of the Consensus Statement on Late Onset Schizophrenia and Very Late Onset Schizophrenia-like Psychosis (Howard et al, 2000) this subject has attracted increasing attention from researchers and clinicians.

In order to collect together the most recent findings in psychosis in the elderly, a book has been prepared by interested researchers and clinicians, most of whom are related to the Section of Old Age Psychiatry. It will be published by Martin Dunitz (Taylor and Francis Group).

Bibliography

1. Camus V, Katona C, de Mendonca Lima C, et al. Teaching and training in old age psychiatry: a general survey of the World Psychiatric Association member societies. *Int J Geriatr Psychiatry*. 2003;8:694-699.
2. Draper B. Training in old age psychiatry. *Int J Geriatr Psychiatry*. 2003;18:683-685.
3. Gustafson L, Burns A, Katona C, et al. Skill-based objectives for specialist training in Old Age Psychiatry - Core-Curriculum. *Int J Geriatr Psychiatry*. 2003;18:689-693.
4. Howard R, Rabins PV, Seeman MW, et al. Late onset schizophrenia and very late onset schizophrenia-like psychosis: an international consensus. *Am J Psychiatry*. 2000;157:172-178.
5. Livingston G, Johnson K, Katona C, Paton J, Lyketsos C. Systematic review of psychological approaches to the management of neuropsychiatric symptoms of dementia (NPS). Submitted for publication.
6. Lyketsos CG, DelCampo L, Steinberg M, et al. Treating depression in Alzheimer disease: efficacy and safety of sertraline therapy, and the benefits of depression reduction: the DIADS. *Arch Gen Psychiatry*. 2003;60:737-746.
7. Mental Health Law: *Monitorul oficial al României*, XIV, Nr. 589, 8 August 2002.
8. Summary—Guidance for the management of behavioral and psychiatric symptoms in dementia and the treatment of psychosis in people with history of stroke/TIA. http://www.rcpsych.ac.uk/college/faculty/oap/professional/guidance_summary.htm.
9. Tåtaru N. Mental Health Services for the Elderly in Central and Eastern European Countries, IPA Regional European Meeting, April 2003, Geneva, Switzerland; 2003.
10. The training implications for psychiatrists in the community. WPA Zone Representatives Meeting, Geneva, Switzerland; 2004.

11. World Health Organization—Department of Mental Health and World Psychiatric Association. *Education in Psychiatry of the Elderly—A Technical Consensus Statement*. Geneva, Switzerland: WHO; 1998.
12. World Health Organization—Division on Mental Health and Prevention of Substance Abuse and World Psychiatric Association. *Education in Psychiatry of the Elderly, a Consensus Statement*. Geneva, Switzerland: WHO; 1998.

Some books which document some recent advances in old age psychiatry:

1. Chiu E, Ames D, Katona C, eds. *Vascular Disease and Affective Disorders*. London, UK: Dunitz; 2002.
2. Baldwin R, Chiu E, Katona C, Graham N, eds. *Guidelines on Depression in Older People–Practising the Evidence*. London, UK: Dunitz; 2002.
3. O'Brien J, Ames D, Gustafson L, Folstein M, Chiu E, eds. *Cerebrovascular Disease, Cognitive Impairment and Dementia*. 2nd ed. London, UK: Dunitz; 2004.
4. Cummings JL, ed. *The Neuropsychiatry of Alzheimer's Disease and Related Dementias*. London, UK: Dunitz; 2003.
5. Burns A, Lawlor B, Craig S, eds. *Assessment Scales in Old Age Psychiatry*. 2nd ed. London, UK: Dunitz.
6. Hassett A, Ames D, Chiu E, eds. *Psychosis in Elderly*. London, UK: Dunitz. In press.
7. O'Brien J, Ames D, Burns A, eds. *Dementia*. 3rd ed. London, UK: E. Arnold. In press.

Edmond Chiu, Professor of Psychiatry, Academic Unit for Psychiatry and Old Age, St.George's Health Services, 283 Cotham Road, Kew Victoria, 3101 Australia
E-mail: e.chiu@unimelb.edu.au

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Advances in family research and intervention

Gabor I. Keitner, Tamás Kurimay, Akram K. Wilson
Section on Family Research and Intervention, World Psychiatric Association

The role of the family in the onset, response to treatment, and course of many psychiatric illnesses continues to be the focus of much research activity (Asen, 2002). This should not be surprising. Illnesses do not exist in a social vacuum, but often involve significant others in the patient's social field. It is reasonable to expect that the way in which such significant others respond to the patient's distress might have some impact on the course and manageability of that illness. The following section will update recent research advances on the role of the family in mood disorders, schizophrenia, and alcohol abuse. The most significant evolution in the field of family studies, as in the field of psychotherapy as a whole, is an increasing emphasis on empirical validation of concepts.

Mood disorders

Major depression

Family studies have explored the burden that caregivers experience when their loved ones are suffering from a mood disorder as well as the effectiveness of family interventions alone, or more often, in conjunction with pharmacotherapy in either improving illness outcome or in improving a family's ability to deal with the sequelae of the illness.

In an attempt to evaluate the effectiveness of family therapy for major depression, Leff et al (2000) compared the effectiveness of systemic couples therapy with that of antidepressant medications in 77 outpatients with mild-to-moderate unipolar depression. Family treatment consisted of 12 to 20 couple sessions over a 9-month period. Outcome was assessed as a change in the Beck Depression Inventory (BDI) and the Hamilton Rating Scale for Depression (HRSD) scores. Fewer patients dropped out of the couples than the drug therapy groups. Couples therapy was found to be superior to drug therapy as judged by the BDI scores but not by the HRSD scores which improved equally with both treatments. This study suggests that at mini-

mum, couples therapy was as effective in treating this depressed population as was pharmacotherapy.

Another study evaluated the relative effectiveness of pharmacotherapy alone (P), pharmacotherapy and cognitive therapy (P + CT), pharmacotherapy and family therapy (P + FT) and all three combined (P + CT + FT) for 121 patients with severe unipolar depression recruited from an inpatient setting. Using the HRSD as the outcome measure, this study found no differences in response or remission rates with the addition of CT or family therapy to pharmacotherapy. However, response was greater especially for the most severely depressed patients, when all three (P + CT + FT) treatments were combined simultaneously. As well, the functioning of families who received additional family therapy improved significantly independent of improvement in depressive symptoms (Keitner et al, 2003).

These studies suggest that family therapy alone or in conjunction with pharmacotherapy can help the depressed patient get better and their families to improve their functioning.

Bipolar disorder

A number of studies have reported the significant stress that caregivers of bipolar patients experience even when the patient is not in an episode. Concerns include the disruptions associated with manic episodes, fear of violence, worsening of the marital relationship, and the effect of the illness on parenting and children. Legal and financial problems are not uncommon. Up to 70% of caregivers experience such a sense of burden. Specific questions that families struggle with include: whether they should accept or confront disruptive behavior, how to separate willful from illness-related behaviors, how to deal with noncompliance, how to recognize prodromal symptoms and how to get patients to a health care facility when they do not want to go. Such family burden can have adverse effects on illness course.

A number of family-focused treatment outcome studies for patients with bipolar disorders have been reported over the past few years. Miklowitz and coworkers (2000) randomized 101 outpatients with bipolar disorder to 21 sessions of adjunctive family focused therapy (FFT) vs pharmacotherapy alone. FFT led to a significantly higher 1-year survival rate (71%) than pharmacotherapy (47%). FFT was effective in preventing depressive, but not manic relapses. Another randomized trial of FFT involving 53 bipolar patients (Rea et al, 2003) found that patients receiving FFT had significantly fewer number of relapses (28%) and rehospitalizations (12%) than those receiving pharmacotherapy alone (60% and 60%, respectively). Combining adjunctive FFT with interpersonal social rhythm therapy also led to significantly longer survival times and a greater reduction in depressive symptoms over a 1-year follow-up period than did pharmacotherapy alone.

Psychoeducational groups/family approaches have also been shown to be helpful in the management of bipolar disorders. A randomized study of a multi-family group (excluding patient) psychoeducational program (n=30) vs treatment as usual (n=15) showed the family treatment to reduce a sense of burden by the family members who in turn blamed the patient less for their illness.

Another conceptual framework of the family and a family therapy approach that has been investigated is the McMaster Model of Family Functioning and the Problem Centered Systems Therapy of the Family (PCSTF) (Ryan et al, 2005). Ninety-two acutely ill bipolar patients were randomly assigned to pharmacotherapy alone (P) pharmacotherapy plus family therapy (P + FT) or pharmacotherapy plus a multi-family (including patient) group intervention (P + MFGT). The additional family interventions did not impact on recovery rates or time to recovery but did have a significant beneficial effect on improving family functioning and the family's ability to cope with the illness (Keitner et al, 2003).

A number of conclusions are warranted at this time based on these recent studies. Adjunctive family therapy appears to be somewhat more effective in symptom reduction for patients with unipolar than bipolar illness. Family therapy in bipolar disorder does appear to delay or reduce relapse rates. Family therapy is helpful in both unipolar and bipolar disorders in improving family functioning beyond what may occur due to symptomatic improvement in the patient. Improved family functioning leads to more effective ways of coping with the illness by the family (Keitner et al, 2004).

Alcohol abuse

General issues

Alcohol consumption is part of daily life in many cultures of the world. The negative effects of excessive alcohol consumption are also widely distributed. Alcohol is tangled with many aspects of life, including social relations, celebrations, rituals, and religious practices. While in some cultures it is a basic part of everyday life, in other cultures it is forbidden and unacceptable by societal standards.

Every society and culture restricts the quantity of alcohol consumption. The rapid development of societies can lead to the loosening of social norms. Economic changes can undermine cultural norms and social practices, and established drinking practices cannot keep up with all these changes. Such changes have occurred in many countries, and on many continents. These changes will be considered in a summary of the results of the previous four years' research.

There have been two paradigm shifts in research on alcohol consumption. The first is an emphasis on safe alcohol consumption and its advantages as opposed to the

previously promoted concept of abstinence. The second paradigm change was a focus on drinking patterns that could be used to describe the characteristics of alcohol consumption, rather than a focus on the amount of alcohol consumed. A methodologic problem is how to define alcohol abuse, binge drinking, and heavy drinking in different cultures, which may use different units of measurement.

Family research

The following areas have been the focus of recent research in alcoholism and families: genetics; psychophysiology–search for vulnerability; family interactions–family factors in the development and maintenance of alcoholism; prevention and therapy.

The transmission of alcohol addiction is influenced by vulnerability, the so-called low response to alcohol consumption. Factors that increase vulnerability include antisocial behavior, alcoholism of parents and psychiatric comorbidities–primarily depression. Protective family factors include rituals, healthy drinking habits, and a stable marriage. Environmental factors do not appear to be specific in precipitating alcoholism because other drug addictions have similar environmental factors.

The behavioral patterns and characteristics of children of alcoholic parents as well as factors that affect quality of life continue to be extensively researched. Gender differences in alcoholism are found and in certain types of alcoholism father-son transmission seems specific.

Historically there was a systematic perspective that postulated an adaptive function of alcohol consumption in the marriage, assuming that alcohol consumption brought a dysfunctional family system into equilibrium. However, the latest studies, mostly of people with antisocial behavioral problems do not support this theory.

The psychotherapy of alcohol dependence has long been neglected by psychiatric research. Recently, however, a number of clinical and experimental studies have been performed examining the efficacy of different kinds of psychotherapeutic approaches in alcoholism. Most clinical settings follow an integrative model based on behavioral and coping skills therapy, along with psychodynamic and family therapy. Further therapy elements are self-help groups. Most therapies are conducted, as group therapy but individual therapy is a well-examined alternative. Early intervention in alcohol dependence is of special relevance. Motivational enhancement is a key goal of alcohol therapy and can be implemented early or in the detoxification phase. Meta-analysis of the effectiveness of different therapy models show that psychotherapeutic treatments are effective and those therapies that integrate the family into the treatment are more effective.

Schizophrenia

Effect of schizophrenia on families

Many studies have highlighted the impact that schizophrenia has on fami-

lies. Recent work has focused on the stressful effect of the first episode of psychosis especially on mothers of younger patients. Data suggest that the distress is less in older family members (or caregivers) working full time. The life of caregivers is seen as doubly problematic, experiencing stigma personally and vicariously through their relative. Particularly problematic areas of concern include protracted periods of time before the establishment of a definite diagnosis, ambivalence about medication and "never giving up."

The 2 weeks before hospitalization period has been found to be a particularly burdensome period. An important predictor of burden is the change of relationship between the caregiver and the affected individual. Conflicts between family caregivers increases the burden. Other aspects that predict family burden are their threats, nuisance, and restricted social life. The patient's aggression and/or substance abuse are of less concern. Highlighting the transcultural nature of burden is an Indian study showing that mental illness (notably schizophrenia) significantly jeopardizes family relationships.

The most burdensome stressors for many parents are the negative symptoms. Disorganized behavior is also a crucial factor in family burden. A study from Japan found that subjective and objective burdens were significantly predicted by a patient's Global Assessment of Function (GAF) scores—not by Axis 1 diagnosis or the Positive and Negative Syndrome Scale (PANSS) score. The distress experienced by the family extends equally to even those members living separately. This Canadian finding is consistent with another British study, which reported that 25% of both groups met GHQ criteria for having a mental disorder. In addition, parents' burdens were closely interconnected with the illness curve of patients, with 40% of parents experiencing a constant high level of burden.

The experience of families and other caregivers however, are not always bleak. Some researchers point to the positive aspect of care giving, including satisfaction from care giving activities, feelings of gratification, love, and pride. Factors that influenced contact frequency between family and patients were not determined by the relatives' burden nor patients' symptom severity, but mainly by demographic data. According to a large British study (UK 700 trial) relatives do not avoid contact with their ill member even though they may experience distress over the patient's illness.

Some relevant and useful suggestions have emerged from this line of research. First, in chronic schizophrenia, treatment of particular symptom dimensions (such as the high excitement component of the PANSS score) may be more effective in relieving caregiver burden than interventions directed towards extending the patient's social network. Second, there is considerable evidence that psychoeducational programs (as part of behavioral family therapy BFT) are associated with lower family burden, more positive atti-

tudes toward continuing care of the patient and less relapse (one patient relapsed compared to 13 in a control group which did not have a family program), and the dose of neuroleptics was significantly lower on discharge (than admission) in the BFT group.

A recent large multicenter European study (EPSILON) raised concerns about the treatment of schizophrenia by concluding that psychiatric services are largely ineffective in managing the personal impact of schizophrenia, especially upon work, home, and family life. This echoes an earlier study in England in which parents of schizophrenic patients perceived professional staff as of "least help" compared to family members and self-help groups.

Effect of families on schizophrenia

Particular family environments and family treatment approaches have been found to impact on schizophrenic illness. Low daily contact with family members was associated with low quality of life for patients with schizophrenia. The concept of expressed emotion (EE), a measure of levels of criticism and over-involvement in families, continues to play an important conceptual role in family studies. Expressed emotion is a robust predictor of relapse. Family EE and not the caregiver's knowledge about schizophrenia has been found to be an important factor in accounting for a patient's non-compliance. An interesting study about "shifting blame away from ill relatives" in an acculturated Latino American community, found that 91% were rated as low EE and called for efforts to augment positive emotions in key members aiming at establishing a low EE environment.

EE was found not to be a stable family style in the early stage of schizophrenic illness with a tendency of families to have high EE in the first episode of psychosis due to increased burden and less EE over time. Relatives with high EE were found to be more conventional and less satisfied with themselves and their lives. They were also less flexible, less tolerant and less empathic. Patients in high EE families are also more critical, show more subclinical odd behaviors, and have more negative autobiographical memories. High EE families are not always harmful to the patients. Patient's performance improved in memory-loaded vigilance tests in the presence of high EE families, suggesting the role of certain amounts of anxiety in improving performance.

Contrary to previous speculations that schizophrenic patients living with low EE families would not require the protection of medication, recent findings show that medication and EE are independently related to relapse, confirming that EE should have no bearing on the decision to prescribe medication. Some studies have found that single family interventions are more effective than group-based family treatments in decreasing psychotic symptoms or rehospitalizations. This effect is not mediated through improved compliance with medications. Other studies, however, have noted a very beneficial effect of multi-family group treatments

for schizophrenia (McFarlane, 2002). Interestingly Bebbington and Kuipers (2003) observed that "the evidence of the impact of social factors (notably the family) on psychosis has been well authenticated and continues to confirm that such factors, while powerful, are amenable to change."

Conclusions

The areas of family research and intervention reviewed above are all examples of the kinds of family research that is being conducted. There has been a greater emphasis on the utilization of defined and standardized family assessment instruments and family therapy guides that are "manualized" and therefore more amenable to testing and dissemination. Much work still needs to be undertaken due to the substantial heterogeneity of not only the illness under study but also of the families that are put into the unenviable position of having to deal with them.

Bibliography

1. Asen E. Outcome research in family therapy. *Advances in Psychiatric Treatment*. 2002;8:230-238.
2. Bebbington PE, Kuipers E. Schizophrenia and psychosocial stresses. In: Hirsch SR, Weinberger D, eds. *Schizophrenia, Psychosocial Aspects*. Oxford, UK: Blackwell; 2003:615-622.
3. Cutting LP, Docherty NM. Schizophrenic outpatients' perception of their parents: is expressed emotion a factor? *J Abnorm Psychol*. 2000;109:266-272.
4. Dixon MJ, King S, Stip E, Cormier H. Continuous performance test differences among schizophrenic outpatients living in high and low expressed emotion environments. *Psychol Med*. 2000;30:1141-1153.
5. Hooley JMR, Hiller JB. Personality and expressed emotion. *J Abnorm Psychol*. 2000;109:40-44.
6. International Center for Alcohol Policies: http://www.icap.org.
7. Keitner GI, Ryan CE, Solomon DA, et al. Family therapy and family functioning in patients with mood disorders. American Psychiatric Association Meeting, San Francisco, Calif. 2003.
8. Keitner GI, Ryan CE, Heru A. The family of the patient with bipolar disorder. In: Sartorius N, Leff J, Lopex-Ibor J, Maj M, Okasha A, eds. *Families and Mental Disorder–From Burden to Empowerment*. London, UK: John Wiley & Sons; 2004.
9. Leff J, Vearnals S, Wolff G, Alexander B. The London depression intervention trial. *Br J Psychiatry.* 2000;177:95-100.
10. McFarlane WR, ed. *Multifamily Groups in the Treatment of Psychiatric Disorders*. New York, NY: Guilford; 2002.
11. Miklowitz D, Simoneau TL, George EL, et al. Family-focused treatment of bipolar disorder: 1-year effects of a psychoeducational program in conjunction with pharmacotherapy. *Biol Psychiatry*. 2000;48:582-592.
12. Rea MM, Tompson FJ, Miklowitz MJ, et al. Family-focused treatment versus individual treatment for bipolar disorder–results of a randomized clinical trial. *J Consult Clin Psychol*. 2003;71:482-492.

13. Ryan CE, Epstein NB, Keitner GI, et al. *Evaluating and Treating Families: The McMaster Approach*. New York, NY: Brunner/Mazel; 2005.
14. Schuckit MA, Smith TL. Correlates of unpredicted outcomes in sons of alcoholics and controls. *J Stud Alcohol*. 2001;62:477-485.
15. Walthams JED, Dingemans PM, Schene AH, et al. Caregiver burden in recent onset schizophrenia and spectrum disorders. The influence of symptoms and personality traits. *J Nerv Ment Dis*. 2002;190:241-247.

Gabor I.Keitner, Professor of Psychiatry, Brown University, Director, Adult Psychiatry and the Mood Disorders Program, Rhode Island Hospital, 593 Eddy Street, Providence, RI 02903, USA
E-mail: GKeitner@lifespan.org

Approaches

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The search for the "Holy Grail." The biology of psychiatric disorders

Mohammed T. Abou-Saleh
Section on Biological Psychiatry, World Psychiatric Association

This update on recent advances on biology was prepared on behalf of the WPA section on Biological Psychiatry and reflects the presentation of the Section at the Athens Congress. Since the first update, the Section has organized a number of scientific symposia, the proceedings of which have been published in the Section's official Journal Acta Neuropsychiatrica on dual diagnosis: a US-UK perspective and recent advances in psychopharmacology of addiction (Abou-Saleh, 2004a; Abou-Saleh, 2004b). Moreover, the Section has prepared a position statement on the efficacy and safety of electroconvulsive therapy (Abou-Saleh et al, 2004c) and a series of workshops have been organized to disseminate its recommendations. Finally, the Section contributed to Intersectional Symposia on the Construction of Future International Classification and Diagnostic Systems and on Prevention in Psychiatry at the WPA Athens Intersectional Congress in March 2005.

Introduction

It is a challenging task to provide an update and capture advances in neuroscience considering the vast literature in preclinical and clinical neuroscience (neuropathology, neurophysiology, chemical pathology, neuroendocrinology, neuropsychopharmacology, neuroimaging, molecular genetics, and genomics). It is prudent therefore to focus on selected areas for review highlighting important advances in areas that the author is particularly familiar with. This is complimented with the section on the implications of recent advances in biological psychiatry for the validation of psychiatric diagnoses. Readers are referred to important publications by the WPA, particularly the series of related articles in *World Psychiatry* and the series of texts edited by Mario Maj, particularly the book on *Psychiatry as a Neuroscience* (Lopez-Ibor et al, 2002).

Paradigm shifts

In this update, paradigm shifts are outlined and recent advances in methods and techniques of clinical neurosciences and their applications in the study of major psychiatric disorder will be exposed. Reference is made to studies of the biology of schizophrenia, and addictions.

Paradigm shifts and new technologies have revolutionized psychiatric research and paved the way for a new era in the third millennium (Stahl and Niculescu, 2002). Clinical comorbidity is common and is the rule rather than the exception as shown in community and clinical population studies. There is evidence that comorbid disorders have shared biological substrates including shared genes. This has implications for psychiatric classifications, which may become more etiology-based rather than descriptive, on a par with the classification of nonpsychiatric medical diseases. It is therefore imperative to study clinical comorbidity in the context of genomics and other biological investigations of psychiatric disorders. It is increasingly recognized that the brain is a highly complex organ with marked structural and functional plasticity and capacity for repair and tissue remodeling. Furthermore, the role of both cell proliferation/cell death and glial cells in psychiatric disorders is coming into focus. A new concept that may inform psychiatry in the coming years is that of cumulative end-organ damage, in this case of different regions of the brain. Some concerted approaches for study, which integrate different methodologies concurrently (phenotypical assessment, pharmacological studies, animal models, molecular and cellular biology, genetics, and brain imaging) have been proposed. At the same time, strenuous efforts are being made in the field to perfect each approach as much as possible. Convergent functional genomics is an approach to integrate data from animal studies, and human genetic and brain imaging studies: to use data from brain imaging studies to select brain regions of interest in a psychiatric disorder and analyze gene expression patterns in those regions in post-mortem human brains or a germane animal model. *Table I* highlights recent advances that emerged using these methodologies (Stahl and Niculescu, 2002).

Neuroimaging studies in schizophrenia

The introduction of structural and functional neuroimaging techniques has revolutionized the study of the biology of psychiatric disorders, promising their deconstruction and the development of novel and more specific treatment. Structural magnetic resonance imaging (MRI) studies have shown conclusively reductions in prefrontal and medial temporal cortical regions in schizophrenia, including studies of first-episode schizophrenia. There is controversy as to whether these abnormalities are genetically determined, and importantly there is an environmental factor involved as shown in studies of monozygotic twins discordant for the disorder, which showed structural abnormalities in the cotwin with the disorder but not

Table I. Paradigm shifts (based on Stahl and Niculescu, 2002).

Comorbidity underlined by overlapping biological mechanisms
- Degenerative changes in schizophrenia and correctable neurotransmitter changes in dementia
- Mood disorders: impact on cognition with extensive comorbidity and progressive end-organ damage
- Substances modulate biochemical pathways involved in mood and cognitive disorders

Tissue remodeling
- Molecular and cellular adaptations after chronic exposure to addictive substances and therapeutics, eg, antidepressants increase hippocampal cells overcoming atrophy caused by stress
- Glial cells and not neurons reduced in postmortem tissue in mood disorders
- Cumulative end-organ damage, eg, bipolar disorder and lasting changes in cortical and subcortical function after stimulant misuse
- Schizophrenic disease starts before symptoms
- Stress (glucocorticoids) within depression causes damage in hippocampus and prefrontal cortex; physical exercise has neurotrophic effects and improves depression
- Chronic stimulant abuse causes cognitive deficits and decreases dopamine function

Endocrinological changes
- Low estradiol levels in depressed women
- Decreased growth hormone response in children at high risk for depression
- Thyroid disorders in depression; lithium regulates thyrotropine receptor gene expression
- Corticotropin receptor downregulation increases sensitivity to stress

Convergent functional genomics
- Gene expression in brain regions of interest (imaging or postmortem) integrated with human linkage data and gene identification
- Chronic alcohol use: expression of 163 out of 4000 genes in frontal cortex differed from controls: mechanism for loss of white matter and neurotoxic effects of alcohol
- Psychogenes and psychosis-suppressor genes in schizophrenia and bipolar disorder
- Cocaine upregulates transcription and gene expression – long-term neural changes (cyclin-dependent kinase) – target for drug development
- Tetrahydrocannabinoids change gene expression (signal transduction and structural proteins)

Pharmacological studies
- Sensitization with increased number of episodes in bipolar disorder and associated with resistance to lithium
- Low levels of omega-3 fatty acids, therapeutic effects in bipolar disorder mediated by signal transduction to nucleus through protein kinase signaling
- Folate supplement to antidepressants
- Antioxidant (vitamin E) supplement to prevent tardive dyskinesia
- Lithium has neurotrophic effects in dementia
- Nicotine increases nerve growth factor effects in Alzheimer's disease

in the healthy cotwin. These findings are supported by using the related MRI technique of diffusion tensor imaging, which depicts the integrity of white matter tracts. Studies using functional MRI have supported these findings, demonstrating reduced activation in the prefrontal cortex and medial temporal cortex in patients with schizophrenia. Moreover, the technique enabled the study of brain function in relation to the experience of auditory hallucinations in schizophrenic patients, reporting an association with reduced activation in the temporal region. These abnormalities have also been detected using other functional neuroimaging techniques measuring cerebral blood flow, brain metabolism and neurochemical mechanisms with positron emission tomography (PET) and single photon computerized tomography (SPECT) indicating changes in frontal, temporal, cingulate, thalamic, and cerebellar regions in patients with schizophrenia. PET and SPECT techniques have been used to study neurotransmitter mechanisms and of particular importance are studies of dopamine D_2 receptors using the amphetamine-induced reduction of raclopride binding indicating increased dopamine release confirming the dopamine hypothesis for schizophrenia (Abi-Dargham, 2004). Finally, magnetic resonance spectroscopy has also demonstrated in vivo neurochemical changes in patients with schizophrenia most notably a reduction in concentration and *N*-acetylaspartate in frontal and temporal cortical regions indicating neuronal loss and supporting findings obtained using structural MRI studies of reduced gray matter in patients with schizophrenia.

Neuroimaging studies in addiction

The introduction of neuroimaging techniques for the study of drug addiction has revolutionized the endeavor to elucidate its chemical pathology, offering new modalities of treatment including psychopharmacological ones. However, addiction is a complex set of disorders with underpinning biological, behavioral, and environmental mechanisms. Recent research has provided new knowledge on the effects of drugs of abuse on biological factors such as genes, protein expression, and neuronal circuits. Less is known about the interrelationships between these biological mechanisms and addictive behavior and about the effects of environmental factors on these biological mechanisms and related addictive behavior. New emerging neuroimaging technologies such as PET, functional MRI (fMRI), diffusion tensor imaging, and magnetic resonance spectroscopy have provided powerful tools to investigate biological mechanisms underlying addiction and their relationships with cognitive, behavioral, and environmental variables. The focus of PET and SPECT studies of drug addiction has been on the brain dopamine system, the pivotal neurotransmitter system through which drugs of abuse exert their reinforcing effects. MRI studies have identified brain regions and circuits involved in drug

addiction (intoxication, withdrawal, and craving) and links of their activities to behavior. Moreover, studies have shown that environmental factors, such as social status, can affect dopamine D2 receptor expression, which in turn affects the propensity for drug self-administration. Recently, a model that conceptualizes addiction as a "state initiated by the qualitatively different and larger reward value of the drug, which triggers a series of adaptations in the reward, motivation/drive, memory and control circuits of the brain" has been proposed (Volkow et al, 2004). These changes result in an enhanced and permanent saliency value for the drug and in the loss of inhibitory control, favoring the emergence of compulsive drug administration. The model also highlights the need for therapeutic approaches that include pharmacological as well as behavioral intervention in the treatment of drug addiction. Further to this, there are new findings on biological vulnerability to drug addiction. It has been hypothesized that genetic factors make a major contribution to the individual's innate vulnerability to addictive behavior. Individuals with low dopamine D_2 receptor levels find methylphenidate pleasant while higher D_2 receptor level individuals find it unpleasant, supporting the "reward deficiency hypothesis" and the notion that individuals with low dopamine receptors may have an understimulated reward system and as a result experience pleasurable effects when subjected to drug-induced elevation in dopamine. It has been suggested that neuroimaging may provide the means to objectively link behavioral and neurochemical changes and to objectively evaluate treatment. With the identification of new genes related to addictive behavior, imaging promises to provide the tool for directly translating this knowledge to an evaluation in humans (Volkow et al, 2004).

Genetic and genomic studies

The second half of the 20th century has witnessed significant advances in the genetics and more recently the genomics of psychiatric disorders, which were made possible by the introduction of sophisticated methodologies of linkage and association studies and using the powerful techniques of molecular genetics. This has occurred against a background of overwhelming evidence for the role of genetic factors in the etiology of psychiatric disorders using the conventional methods of family, twin, and adoption studies which have demonstrated the high heritability of autism, bipolar disorder, and schizophrenia and the important role of environmental factors and importantly gene–environment interactions in the etiology of psychiatric disorders. While linkage studies have been conducted to study major gene effects, association studies proved to be productive in identifying genes of partial effect, which is the rule in psychiatric disorders, these being complex diseases with multifactorial etiology and importantly are polygenetically determined. Moreover, the complexity of mental disorders is related to the lack of validity of present classification systems of psy-

chiatric disorder, of phenotypes, which lack validity. Secondly, complex patterns of transmission and the lack of one-to-one correspondence between genotype and phenotype in the majority of psychiatric disorders: penetrance, variable expressivity, gene–environment interaction, genetic heterogeneity, mitochondrial inheritance, imprinting, and other epigenetic phenomena (Merikangas and Risch, 2003). Moreover, psychiatric morbidity has been shown to be the rule rather than the exception in the majority of psychiatric disorders, in part an artifact of the present classification systems with nevertheless shared underpinning biological, including genetic, mechanisms. It is therefore necessary to redefine psychiatric phenotypes and use endophenotypes for their classification. For example, advances in cognitive neuroscience and neuroimaging have identified endophenotypes for schizophrenia. Neurocognitive deficits have been shown to have high heritability in family and twin studies and to be associated with structural brain abnormalities of enlarged ventricles, reduced hippocampal volume, and reduced N-acetylaspartate levels. Moreover, the COMT val108-158 met genotype, which is associated with low prefrontal dopamine function and with neurocognitive deficits is excessively transmitted to schizophrenic offspring.

Pharmacogenomics

The other major development is pharmacogenomics, which involves the identification of genes or gene products with implication for pharmacotherapy of psychiatric disorders. The identification of genes that are involved in the pathogenesis of psychiatric disorders will identify new targets for pharmacological treatment and ultimately lead to the use of tailor-made pharmaceuticals. The cardinal examples have been the 5-HT_2 genotype and its role in response to clozapine and the genes involved in the cytochrome P450 system and its role in psychoactive drugs metabolism, development of side effects and treatment response.

The impact of genetics and genomics on psychiatric practice in the 21st century is yet to be witnessed despite these impressive developments and advances. The prediction of risk for the development of psychiatric disorders will never be better than 50%, since genetically identical individuals are discordant for schizophrenia 50% of the time (McGuffin, 2002). Nevertheless, genetic risk factors (genotypes) could refine risk prediction. McGuffin (2002) has also drawn attention to the important notion that the study of the genetics of psychiatric disorder far from “geneticizing” the disorders and increasing its stigma, will legitimize these disorders as “real” diseases, which are in the main biologically determined and are not expressions of personal failings or weaknesses. Merikangas and Risch (2003) have addressed the question of the impact of genomics on psychiatric science and practice and concluded that increased “integration of advances in neuroscience and genomics along with the information from population-based

studies and longitudinal cohorts, innovations in our conceptualization of the mental disorders and the identification of specific risk and protective factors, will lead to more informed intervention strategies in psychiatry." They also predicted that understanding the significance of genetic factors and their interpretation for patients and their families will contribute to prevention of psychiatric disorders.

Biological criteria for diagnosis

Robins and Guze (1970) had proposed the use of laboratory studies for psychiatric diagnosis but had not introduced them as diagnostic criteria or as a basis for classification. This was followed by an elaboration of these criteria by Kendler (1980), who distinguished between antecedent validators including familial aggregation, concurrent validators, and predictive ones. However, it was Andreasen (1995) who proposed "a second structural program for validating psychiatric diagnosis" proposing additional validators from molecular genetics, and neuroscience, including cognitive neuroscience, that are capable of linking symptoms and diagnosis to their neural substrates.

Kendell and Jablensky (2003) critically examined the concept of validity as applied to diagnosis and suggested that a diagnostic category should be described as valid only if it is diagnostic; characteristic is a syndrome that is separated from neighboring syndromes and normality by a zone of rarity, or, alternatively, if the category's defining characteristics are more fundamental, ie, biological abnormalities that are qualitatively different from defining characteristics of other conditions with a similar syndrome such as Down's syndrome and Huntington's disease. It is noteworthy that the criteria of zone of rarity are not used in the classification of medical disorders such as diabetes where diagnostic subgroups have been established based on differences in pathology or etiology. Moreover, the distinction between psychiatric disorders and normality is similar to the distinction between medical disorders and normality such as hypertension with variation that is continuous with no demonstrable point of rarity and the boundary is decided on pragmatic basis.

While the debate on the validity of present day diagnostic entities continues, major advances in the biology of these entities have hardly ever been considered as validating criteria. Yet, such advances cut through the heart of the matter and inform the face, concurrent, construct and predictive validities and utility of these nosological "inventions" and ultimately turn them into diagnostic "discoveries."

A good example was the introduction of dexamethasone suppression test (DST) as a diagnostic test for melancholia, which was proposed for inclusion in *DSM-IV*, but later discarded for its lack of diagnostic specificity. However, the DST has been shown to have good and meaningful predictive validity. Moreover, the dramatic

developments in neuroimaging techniques and cognitive neuroscience have established "valid" correlates of these constructions and predictors of outcome and response to pharmacotherapy as shown in numerous studies in schizophrenia.

Finally, there comes the genomics revolution, which promises to deconstruct current diagnostic entities into genotypes, descriptive phenotypes, and endophenotypes, and related dysfunctions in neurocircuits and abnormalities of neurotransmitter receptors and enzymes (Stahl, 2003). Whilst it is premature to carve the nature of psychiatric diagnoses at the joints using current biological tools and criteria, recent advances in techniques and their applications promise the establishment of more valid and useful psychiatric nosology based on their etiology and underpinning biological and psychosocial mechanisms.

Conclusions

The second half of the 20th century witnessed major advances in neurosciences and in their use and applications for the benefit of the psychiatrically ill. The first and the most important landmark was the chance discovery of the major psychotropic medicines, which provided "bridges" to the chemical pathology of schizophrenia and depression; psychoanalytical "brainlessness" was replaced by reductionistic "mindlessness." There followed an explosion of preclinical and clinical neuroscience studies in search for the "Holy Grail" of psychiatric disorders—their etiology and pathogenesis. Concurrently, sparked by observations of psychiatric symptoms of endocrine disorders, neuroendocrine techniques were introduced with important advances. However, it was the introduction of the variety of neuroimaging techniques, complemented by the use of cognitive neuroscience assessments to dissect in vivo the anatomy, pathophysiology and neuropharmacology of major psychiatric disorders, that revolutionized the study of their underpinning biological mechanisms. Finally, there comes molecular genetics and the sequencing of the human genome, providing a quantum leap and the ultimate advance. These advances promise to deconstruct present diagnostic entities into their true genotype–phenotype entities and inform the development of "designer medicines" and the introduction of preventive interventions. Moreover, there are concerted approaches for study, which integrate different methodologies concurrently (phenotypical assessment, pharmacological studies, animal models, molecular and cellular biology, genetics, and brain imaging). Such new knowledge will impact psychiatric practice with improvements in treatment, care, and preventive approaches, and better quality of life for the psychiatrically ill. Whilst our search for the "Holy Grail" continues, we now have the roadmap and the tools for its excavation.

Bibliography

1. Abi-Dargham A. Do we still believe in the dopamine hypothesis? New data bring new evidence. *Int J Neuropsychopharmacol*. 2004;(suppl 1):S1-S5.
2. Abou-Saleh MT. Dual diagnosis of substance misuse and psychiatric disorders: a US–UK perspective. *Acta Neuropsychiatr*. 2004a;16:1-2.
3. Abou-Saleh MT. Recent advances in the psychopharmacology of addictions. *Acta Neuropsychiatr*. 2004b;16:231-232.
4. Abou-Saleh MT, Papakostas Y, Zervas I, Christodoulou G. The World Psychiatric Association position statement on the use and safety of electroconvulsive therapy. *Science Care Bull WPA Scientific Sections*. 2004c 1: 7-11.
5. Andreasen NC. The validation of psychiatric diagnosis: new models and approaches. *Am J Psychiatry*. 1995;152:161-162.
6. Kendell R, Jablensky A. Distinguishing between the validity and utility of psychiatric diagnoses. *Am J Psychiatry*. 2003;160:4-12.
7. Kendler KS. The nosologic validity of paranoia (simple delusional disorder): a review. *Arch Gen Psychiatry*. 1980;37:699-706.
8. Lopez-Ibor JJ, Gaebel W, Maj M, Sartorius N. *Psychiatry as a Neuroscience*. John Wiley & Sons Ltd; 2002.
9. Merikangas KR, Risch N. Will the genomics revolution revolutionize psychiatry? *Am J Psychiatry*. 2003;160:625-635.
10. McGuffin P. Genetic research. In: Lopez-Ibor JJ, Gaebel W, Maj M, Sartorius N, eds. *Psychiatry as a Neuroscience*. John Wiley & Sons Ltd; 2002.
11. Robins E, Guze SB. Establishment of diagnostic validity in psychiatric illness: its application to schizophrenia. *Am J Psychiatry*. 1970;126:983-987.
12. Stahl SM. Deconstructing psychiatric disorders, part 2: An emerging, neurobiologically based therapeutic strategy for the modern psychopharmacologist. *J Clin Psychiatry*. 2003;64:1145-1146.
13. Stahl SM, Niculescu AB. Molecular and cellular biology research. In: Lopez-Ibor JJ, Gaebel W, Maj M, Sartorius N, eds. *Psychiatry as a Neuroscience*. John Wiley & Sons Ltd; 2002.
14. Volkow ND, Fowler JS, Wang GJ. The addicted human brain viewed in the light of imaging studies: brain circuits and treatment strategies. *Neuropharmacology*. 2004;47(suppl 1):3-13.

Mohammed T. Abou-Saleh, Professor of Psychiatry, St George's Hospital Medical School, Cranmer Terrace, London SW17REO, UK
E-mail: mabousal@sghms.ac.uk

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Interdisciplinary collaboration—obstacles and some probable solutions

Uriel Halbreich
Section of Interdisciplinary Collaboration, World Psychiatric Association

Over the last half century there have been many forces that have led to the change in the way mental health is perceived and diagnosed by physicians. The intellectual field has tremendously grown, with an increase in the general knowledge, concepts, and understanding of the human brain and its processes. Especially during recent decade, there has been an explosive growth of knowledge and information about physiology, pathology, and clinical phenomena of the central nervous system (CNS) and its related disorders. The knowledge base is expected to extend at an exponential pace. However, in order to keep expanding, research institutes, professional organizations, the drug industry, scientists, and physicians need to come together so that knowledge can be deepened and expanded and applied to the fullest extent.

Physicians' individual skills need to be developed so that procedures ranging from as basic as specific diagnosis to complex multifunctional treatments would be implemented according to the new knowledge. At the same time, socioeconomic factors, and drive for profits more than ever may cause various positive as well as negative changes in medical fields. All of these influences have been forcing professionals to have to adapt to the current views, standards and procedures (Drotar, 2002).

The composite perspective points to one obvious aspect: that individual work, segregated and isolated, is not sufficient anymore. Professionals must collaborate together to complement each other's skills and disciplines in order to continue to obtain meaningful new knowledge and advance the field (Drotar, 2002).

These aspects have been dealt with by the WPA Section on Interdisciplinary Collaboration (eg, Gaszner and Halbreich, 2002; Riegelhaupt and Halbreich, 2003) and will be somewhat further illuminated here.

Interdisciplinary collaboration, although not a new concept and quite widely accepted as a necessity in many fields, is a

"technique" that is becoming more widely practiced. At this point in time, professionals in many biomedical fields have discovered the intricate structural aspects of their organs-in-focus, its physiology, and biochemistry. The more intricate and in-depth the knowledge becomes, the more obvious it is that ever-specialized skills might lead to narrow tunnel vision and therefore to limited and ever-misleading results. However, the practice of not incorporating other findings into a person's study would often lead to results that are incomplete or even not correct. In the basic and clinical neurosciences, the width and depth of knowledge is such that there is no doubt that a single physician or an individual researcher would overlook certain aspects when attempting to describe a system that is incredibly complex.

Multidimensional interdisciplinary collaboration is needed.

In order for new collaborations to be implemented, several important steps should take place. First, a closer relationship between professional organizations must be promoted. There are many (actually, too many) different associations for each field of study and specialty; therefore often professionals are working competitively instead of with each other (Falcone, 2001). This unfortunately is problematic by itself, as the goal of these professionals should be to find ways to increase their mutual interests. In the field of medicine this should also lead to increased patient and society well-being. However, in fact, with the competition the mutual goal is often hampered (Andreopoulos, 2001). Once organizations begin to work with each other more closely within their own fields, as well as related fields, a new network starts to take root. This network will contain many links between professional organizations, including personal contacts, and thus lead to a larger group of people available to assist each other and be "connected" to one another (Drotar, 2003; Lewis et al, 2001). From this new accessibility of people to each other, new programs can be instituted that would include the multiple disciplines and, from there, new knowledge and, eventually, new technology. With people working together, the scientific lobbying community would be more efficient. With more connections it would consequentially mean more people-power to promote well-being. These intergroup connections would also inevitably lead to ties with other outside forces such as media, and therefore public awareness of current issues would be heightened. This factor is especially important because it is one of the main goals of professional organizations and researchers, since they are working essentially to improve healthcare. With many people working in concert towards the same goals, credentials and procedures would begin to be standardized worldwide. Furthermore and importantly, the connections would allow greater and better clusters of resources to be available and utilized. The collaboration of societies alone would have a substantial impact on the growth of knowledge and progress in the world of health care.

It is important that professional societies, researchers, and other professionals work with governmental, international, and other professional organizations, as well as the pharmaceutical industry. The most beneficial partnership that can be formed is the “strategic alliance.” This is defined as a tool to accomplish specific common objectives. Although ongoing broad collaboration is imperative within a very broad spectrum of societies and professionals, it is also important to have relationships specifically to achieve a given goal. These relationships are built because the professional organization or pharmaceutical company cannot obtain the desirable result on its own. It would be more efficient to gain assistance from a specialized outside source because a corporation may lack the expertise to carry out the specific operation. This is the basic level of interdisciplinary collaboration and it is usually quite limited to a smaller number of participants.

Collaboration is obviously necessary, but without checkpoints and appropriate controls it can result in some common problems. Individual interests, personalities, and politics between participants may lead to competition or refusal to collaborate even if there is a mutual goal or a common denominator in context. In order for a smooth relationship to develop, persist, and flourish, some basic, but fundamental points should be clearly stated prior to excessive collaboration. The goals need to be very clear, precise, and concise (Spilker, 1994). The two or more parties must identify what they are attempting and agree upon it together. The results should have a measurable aspect to ensure that the collaboration is implemented to get closer to the goals. For example, through the pharmaceutical industry’s collaboration with professional organizations and Academic Institutes, knowledge will be shared and promote discovery of new compounds and their clinical applications. The goals need to be realistic and achievable, otherwise limited available resources and time may be wasted.

The pharmaceutical industry is a group that would be highly beneficial for scientists and other professionals to collaborate with. Collectively it controls vast funds, highly trained personnel, and many connections and networks. The pharmaceutical industry, though, is quite selective about what activities it will and will not participate in (Riegelhaupt and Halbreich, 2003). Being driven by the need to increase revenue, it may be idealistically disappointing that the pharmaceutical industry is not able or willing to fund or help in many worthwhile projects, in which it does not have a direct financial interest. However, many corporations do support general public well-being projects in order to enhance their image, especially in regions in which they have a market or other vested interests.

There are many obstacles to be overcome for the ideals of interdisciplinary collaboration to be a reality. Unfortunately, when collaborating with people in different disciplines, each person’s goals and priorities

are usually very different. Different people have different resources available to them, which may make interdisciplinary collaboration so efficient. However, the one resource that a potential collaborator has and rarely is willing to share is funds. Money is one of the strongest driving forces behind research, and a person or company does not readily part with it. This is especially true in the pharmaceutical industry. A pharmaceutical company's goal is to make profit, just like every other corporation. For this reason, a pharmaceutical company will severely limit the amount of not-for-profit activity that it participates in. Since the pharmaceutical company may be the supplier of drugs, personnel, and infrastructure, its unwillingness to provide these services to a specific goal-oriented task may thus limit the gain obtained.

Another financially related issue that makes the pharmaceutical company especially selective about the projects in which it may participate is the high risk of pharmaceutical research, development, and studies: there is no guarantee that the desirable results would be obtained. The pharmaceutical company may invest millions of dollars in something that could result in absolutely nothing. Therefore, the company's officials would only invest in projects that they believe show a high potential for a strong yield with a minimal risk. Otherwise their own positions may be in jeopardy. The time it takes for a pharmaceutical company to go from idea, to proposal, to clinical trials, and to marketing is tremendous, and this is another issue that needs to be overcome (Spilker, 1994). This time issue is associated with two more major issues that the management of the pharmaceutical company has to deal with. First, the fact that each pharmaceutical product may take years to get to the market, and thus consume investment with no immediate or current returns, makes the company selective about which projects it will take on. A second issue, with the time span it takes for pharmaceutical products to be completed and get to the market, is the advantage of being first with a specific product. If one company starting development first spent 6 years and 6 months on a project, another could have started later but completed their development in only 6 years, and therefore the first company may lose the race to the market and therefore gain a smaller market-share. This race and uncertainty pose a problem for collaborators. Due to the knowledge that a pharmaceutical company holds from its extensive research, it would be a beneficial collaborator for anyone. However, industry withholds an enormous amount of proprietary information due to the competitive market.

There are few other problems that exist when collaborating with a pharmaceutical company (Spilker, 1994). The strict regulations imposed by governments cause industry to be very cautious, and sometimes overly so. The drug industry will not take on projects that might hurt the company's image or may prevent efforts to promote drugs. They would also not conduct research that is controversial or risky, although the end result

may be very beneficial. Pharmaceutical companies are driven for maximum product with most profit, and cannot withstand a tarnished brand. A company must pre-evaluate every step in the process before accepting a new project. Since multiple variables, physiological and/or financial, may influence the introduction and marketing of any drug, every single situation and variable must be accounted for, and this complexity also controls a company's ability to undertake risky and uncertain projects.

It is obvious that with the knowledge that has already been gained and with the technology derived over the last decade, professionals, organizations, and pharmaceutical companies have each played their role to their perceived best extent. However, at this point in time, it seems that it is not enough for everyone to be on their own; professionals and related organizations geared toward research must assist each other and share knowledge in order to allow for expansion. It is impossible for one person to master all the currently available and relevant knowledge. This process cannot happen immediately—it may begin to develop as people truly internalize the essential need for interdisciplinary collaboration and move from lip service to operational conceptualization to implementation.

Bibliography

1. Andreopoulos S. The unhealthy alliance between academia and corporate America. *West J Med*. 2001;175:225-226.
2. Drotar D. Reflections on interdisciplinary collaboration in the new millennium: perspectives and challenges. *J Dev Behav Pediatr*. 2002;23:175-185.
3. Falcone, D (): Multitude of professional organizations offers choices and benefits for laboratorians. *Med Lab Observer*. 2001:38-41.
4. Gaszner P, Halbreich U. Interdisciplinary Collaboration for Enhancement of Mental Health, In: Christodoulou G, ed. *Advances in Psychiatry World Psychiatric Association*. Athens, Greece: Beta Medical Publishers; 2002:71-76.
5. Lewis S, Baird P, Evans RG, et al. Dancing with the porcupine: rules for governing the university-industry relationship. *Can Med Assoc J.* 2001;165:783-785.
6. Riegelhaupt S, Halbreich U. Interdisciplinary Collaboration: The Obvious Need and Basic Structures. *Psychiatr Neurol Jpn*. 2003;105:287-293.
7. Spilker B. *Multinational Pharmaceutical Companies, Principles and Practices*. Second Edition. New York, NY: Raven Press; 1994.

Uriel Halbreich, Professor of Psychiatry, State University of New York at Buffalo, Hayes Annex C, Suite 1, 3435 Main Street, Buffalo, New York, NY 14214, USA
E-mail: urielh@buffalo.edu

Violence and conflict

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Psychological consequences of torture and persecution

James M. Jaranson, Marianne Kastrup
Section on Psychological Consequences of Torture and Persecution,
World Psychiatric Association.

Introduction

Since its inception in 1994 and acceptance as an official permanent section in 1996, the WPA Section on Psychological consequences of Torture and persecution has been active most notably in providing awareness through educational venues of politically motivated torture and its consequences. The Section actively organizes and presents symposia at conferences and scientific meetings sponsored by the WPA and other professional organizations worldwide. A newsletter to Section members reviews issues and research findings related to torture and persecution. Section members actively publish in the professional literature, in particular concerning issues of assessment, diagnosis, treatment, and prevention.

It is very difficult to separate the political from the scientific in the field of torture rehabilitation (Jaranson, 1998). The Section regularly addresses sociopolitical issues including the persecution of psychiatrists and other health professionals working with torture survivors, victims of the political abuse of psychiatry, and the impunity of perpetrators of torture. Statements, guidelines, and protocols issued in 2003 by the Section members include (i) Statement and Guidelines for the Protection of Survivors of Torture and Other Acts of Persecution in Exile (Thomas Wenzel), and (ii) Psychiatric Protocol to be Applied at Hungarian Refugee Reception Centers (Lilla Hardi). Efforts have also focused on making the Section's concerns prominent in the WPA statutes, bylaws, guidelines, and declarations.

Developments in the field since 2001 and progress achieved

Definitions of torture

Historically, the most common definitions of torture have been those of the World Medical Association (WMA) and the United Nations. The WMA, in its Tokyo Declaration in 1975, states: "Torture is

defined as the deliberate, systematic or wanton infliction of physical or mental suffering by one or more persons acting alone or on the orders of any authority, to force another person to yield information, to make a confession, or for any other reason" (Amnesty International, 1994). The United Nations definition requires, in addition, that the torture is inflicted or instigated by a governmental official (United Nations, 1987). In most health settings, the Tokyo Declarations's definition of torture is found to be the most useful, as it focuses on the suffering of the persons involved rather than the context in which the torture took place.

New definitions of torture

Worldwide, the context of torture has broadened to include many aspects of organized violence, often during war. The World Health Organization (WHO) developed the concept of "collective violence" that has been defined as: "the instrumental use of violence by people who identify themselves as members of a group—whether this group is transitory or has a more permanent identity—against another group or set of individuals, in order to achieve political, economical, or social objective." This definition covers a broad range of forms of violence including conflicts within and between countries, organized violent crime, and various forms of structural violence that may or may not be state perpetrated. Structural violence means economic, political, or social discrimination directed at one or more groups in society (World Health Organization, 2002).

Prevalence of torture

Unfortunately, either torture has increased worldwide or awareness of torture has increased. The most recent worldwide survey done for Amnesty International (2000) between 1997 and 2000 showed that 150 (75%) countries, out of 195 investigated, practiced torture. In 80 of these countries, victims died because of torture. Research on the prevalence of torture among refugees in resettlement countries is the most common and, of course, is higher among those receiving treatment. Community samples are rare. The most recently published of these is by Jaranson et al (2004), who found prevalence rates of torture ranging from 25% to 69% among a representative sample of selected East Africans communities in Minnesota.

The changing context of torture

Anti-immigrant sentiment has not improved and, if anything, has worsened in many European and other Western countries. Those who have escaped to a host country without proper documents may face the risk of being summarily deported back to their home country or placed in detention. In the United States, the Patriot Act intended to make the country safer from terrorist attacks limits the civil rights of immigrants and refugees more than the mainstream population.

The sequelae of torture

Research and clinical judgment over many years has established that the men-

tal health consequences of torture to the individual are usually more persistent and protracted than the physical aftereffects, although, for much torture, there is considerable overlap of the physical and psychiatric. Increasing attention has been paid to pain as a consequence of torture, often either psychophysiologic in origin or worsened by psychiatric disorders. Traumatic brain injury has long been suggested as a factor associated with psychiatric comorbidity in survivors of mass violence and torture. Head trauma is frequent during beatings in torture. Some studies have suggested an association between head trauma and neuropsychiatric symptoms, such as cognitive deficits.

Neuropsychiatric symptoms are often difficult to diagnose correctly because the multiplicity of symptoms is great and comorbidity occurs frequently. The most commonly diagnosed psychiatric disorders are still major depression and posttraumatic stress disorder (PTSD). Considerable research in recent years has further documented the neurobiological basis of PTSD. Controversy about the applicability of diagnosing PTSD in torture survivors persists. Especially in countries where torture is routinely practiced, PTSD is often viewed as a Western ethnocentric and very limited diagnostic category which fails to capture the magnitude of torture as a trauma. There is no doubt that simply to label survivors as having PTSD is inadequate to describe the magnitude and complexity of the torture's effects, and care must to taken to avoid overmedicalizing the problems. However, the considerable recent research documenting neurobiological and neurophysiological changes found in PTSD (Basoglu et al., 2001) indicates that the disorder is more than just a Western construct, even though the symptom constellations may not be applicable in all cultures to reach a full diagnosis. Compared with the DSM-IV, the ICD-10 has to some extent partially solved this problem by adding the diagnostic category of "enduring personality change after catastropic experience."

Recent evidence has also shown that PTSD may have a dose-response effect. PTSD showed the greatest additive effect of torture in the study by Jaranson et al (2004) of East Africans resettled in the United States. Silove et al (2002) previously found an additive effect of PTSD in Tamil torture survivors in Australia after accounting for other traumatic events.

A number of practitioners have proposed a torture syndrome, broader than PTSD but including most of the PTSD symptoms (eg, Genefke and Vesti, 1998). What distinguishes torture compared with other forms of severe trauma is that torture is both mental and physical and has a political aim in a sociopolitical context, ie, torture intends to harm individuals and groups in a political context. Wenzel et al (2000) argued for continuing to look for a broader conceptualization for the traumatic aftereffects of torture, including feelings such as shame and guilt, and existential rumination. The interest in delineating a specific nosological entity "torture syndrome" has been

diminishing in recent years, and the torture syndrome has not yet been validated with qualitative empirical studies, but clinical descriptions have generated the hypothetical syndrome. It remains to be seen whether future research will provide that validation.

The social consequences both to the individual and to the family and society are considerable. Silove proposed an integrated psychosocial framework suggesting that torture challenges 5 core adaptive systems: safety, attachment, justice, identity-role, and existential-meaning. This framework was elaborated with respect to PTSD by Ekblad and Jaranson (2004). Since torturers use the individual as a way of controlling or frightening the torture victim's family and community, the ramifications of torture extend far beyond the survivor. Societies may remain highly polarized, suspicious, and angry, which requires a process of reconciliation for national healing.

Terrorism and torture

Especially since the terrorist attacks on New York City and Washington, DC on September 11, 2001 (9/11) and, subsequently, the documentation of the United States torturing prisoners in 2004 at the Abu Ghraib prison in Iraq, the media has fostered a virtual explosion of information about torture and terrorism. After 9/11, terrorism and its relationship to torture became a controversial issue. Questions were raised about whether torture methods should be used to interrogate terrorists, such as at the US detention facility in Guantanamo Bay, Cuba. Subsequently, evidence of prison abuses and alleged torture by coalition forces in Iraq was uncovered at the Abu Ghraib prison. The island of Kos Declaration produced during the WPA-cosponsored 18th Panhellenic Congress of Psychiatry expresses concern about the abuse of detainees at Iraqi prisons (*Science & Care*, 2004). This has fueled an international discussion about what methods constitute torture and whether the use of torture to extract information from suspected terrorists can be justified.

The WPA Section supports the many international conventions which prohibit the use of torture and similar actions under any circumstances. Of note is the United Nations Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (United Nations, 1987), of which 74 states are signatories and 136 are parties. The Convention Against Torture states that there are "no exceptional circumstances whatsoever" to justify torture. At the same time, the Convention states that a country or a person can never engage in cruel, inhumane, and degrading treatment or punishment.

Assessment

Considerable progress has been made on the legal and forensic evaluation of torture survivors, notably implementation of the Istanbul Protocol (Iacopino et al, 1999), which was accepted officially by United Nations to document legal, med-

ical, and psychological torture. In 2004, an extensive training module on CD-ROM, *Documentation of Posttraumatic Spectrum Disorders after Torture and Persecution*, by Thomas Wenzel, Section secretary, et al, has been adapted for use by certified trainers administering the Istanbul Protocol.

Rehabilitation

More than 200 torture rehabilitation centers and programs are now registered with the International Rehabilitation Council for Torture Victims in its annual update. When possible, most use a multidisciplinary approach to treatment. A thorough review of rehabilitation and assessment has been completed by Jaranson et al (2001). The consensus in the literature is that cognitive therapy and psychotropic medication are the best documented as effective treatment interventions. Medications more recently have FDA approved indications for treatment of PTSD, especially selective serotonergic reuptake inhibitors (SSRIs). Psychosocial interventions (Ekblad and Jaranson, 2004) and community-based interventions are becoming more accepted, but are still not extensively researched. More attention has been given to the needs of vulnerable groups, for example, women (Kastrup and Arcel, 2004).

Prevention

Passage of the United Nations Optional Protocol is a significant recent advance in the effort to prevent and eradicate torture. This Protocol allows independent investigations into prisons and detention facilities in those countries which have signed.

Among the most important preventive approaches is to encourage universal and speedy ratification by all countries of the United Nation Convention Against Torture, the Optional Protocol, and the International Criminal Court.

Protection of health professionals

Section Chair Inge Genefke, in particular, has been active in supporting Turkish psychiatrist Alp Ayan and other health professionals from the Human Rights Foundation of Turkey (HRFT), which provides treatment to torture survivors throughout Turkey. Dr Ayan was charged with insulting the Turkish Minister of Justice in connection with a press statement in January 2001 that focused on the action against prison operations. Dr Genefke regularly attended the many trials which ended, finally, with acquittal on September 16, 2004.

Research

The relevant books and articles in the professional literature are too numerous to catalogue here and beyond our scope. In addition, much information is more readily available with the increased access and availability of Internet resources and publications. The mental health implications of torture and related trauma may contribute to the field of stress theory, as well as psychiatric assessment and classification of trauma symptoms.

What still needs to happen

After a quarter of a century and dramatic expansion of rehabilitation efforts worldwide, there is still no consensus about the efficacy of treatment interventions for torture survivors. There is little additional literature about treatment outcome, models and structure of rehabilitation services, design of services, cost-effectiveness, or sustainability of services.

Bibliography

1. Amnesty International. *Torture Worldwide. An Affront to Human Dignity*. New York, NY: Amnesty International USA; 2000.
2. Amnesty International. *Ethical Codes and Declarations Relevant to the Health Professions: an Amnesty International Compilation of Selected Ethical Texts*. 3rd revised ed. London, UK: Amnesty International; 1994.
3. Basoglu M, Jaranson JM, et al. Torture and mental health: a research overview. In: Gerrity E, Keane TM, Tuma F, ed. *The Mental Health Consequences of Torture*. New York, NY: Kluwer Academic/Plenum; 2001:35-62.
4. Ekblad S, Jaranson J. Psychosocial rehabilitation. In: Wilson J, Drozdek B, eds. In: *Broken Spirits: the Treatment of Traumatized Asylum Seekers, Refugees, War and Torture Victims*. New York, NY: Brunner-Routledge Press; 2004:609-636.
5. Declaration of the Island of Kos. *Science & Care*. 2004;2:4.
6. Genefke I, Vesti P. (1998) Diagnosis of governmental torture. In: Jaranson JM, Popkin MK, eds. *Caring For Victims of Torture*. Washington, DC: American Psychiatric Press; 1998:43-59.
7. Iacopino V, Ozkalipci O, Schlar C. The Istanbul Protocol: international standards for the effective investigation and documentation of torture and ill treatment. *Lancet*. 1999;354:1117.
8. Jaranson JM. The science and politics of rehabilitating torture survivors: an overview. In: Jaranson, JM, Popkin MK, eds. *Caring For Victims of Torture.* Washington, DC: American Psychiatric Press; 1998:15-40.
9. Jaranson JM, Kinzie JD, et al. Assessment, diagnosis, and intervention. In: Gerrity E, Keane TM, Tuma F, eds. *The Mental Health Consequences of Torture*. New York, NY: Kluwer Academic/Plenum Publishers; 2001:249-275.
10. Jaranson JM, Butcher JN, Halcon L, et al. Somali and Oromo refugees: correlates of torture and trauma. *Am J Public Health*. 2004;94:591-598.
11. Kastrup MC, Arcel L. Gender specific treatment. In: Wilson JP, Drozdek B, eds. *Broken Spirits: the Treatment of Traumatized Asylum Seekers, Refugees, War and Torture Victims*. New York, NY: Brunner-Routledge Press; 2004:547-571.
12. Silove D, Steel Z, McGorry P, Miles V, Drobny J. The impact of torture on post-traumatic stress symptoms in war-affected Tamil refugees and immigrants. *Compr Psychiatry*. 2002;43:49-55.
13. United Nations General Assembly. Convention Against Torture and other Cruel, Inhuman or Degrading Treatment or Punishment. New York, NY: United Nations; 1987.

14. Wenzel T, Griengl H, Stompe T, Mirzaei S, Kieffer W. Psychological disorders in survivors of torture: exhaustion, impairment and depression. *Psychopathology*. 2000;33:292-296.
15. World Health Organization. Collective violence (Chapter 8). In: *World Report on Violence and Health*. Geneva, Switzerland: WHO publication; 2002:213-237.

James M. Jaranson, Co-Chair, Section on the Psychological Consequences of Torture and Persecution, World Psychiatric Association
Co-Chair, Board of Directors, Program for Torture Victims, Los Angeles, CA
Medical consultant, Survivors of Torture International, San Diego, CA
Consultant, Task Force of Torture Treatment Center Senior Clinicians, Portland, OR
Principal Investigator, Refugee Population Study, University of Minnesota
E-mail: jaran001@earthlink.net

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Populations' mental health in postconflict contexts

Eliot Sorel, R. Srinivasa Murthy, Ahmad Mohit, Florence Baingana, Rachel Thomas
Section on Conflict Management and Resolution, World Psychiatric Association

In 2002 the Conflict Management and Conflict Resolution Section's scientific contribution, *Violence Prevention and the Healing of Trauma* (Sorel, 2002) to the WPA Sections' first volume on Advances in Psychiatry focused primarily on individuals and families. In the current chapter, we expand the focus from individuals and families to populations' mental health in postconflict contexts and in complex emergencies.

Of the many etiological factors leading to psychiatric disorders, conflicts have the highest predictable association with their occurrence in the general population. The most frequent diagnoses made are post-traumatic stress disorder (PTSD), depression, and anxiety disorders. In addition, most individuals report psychological symptoms and distress that may not fulfill diagnostic criteria. Furthermore, psychosocial consequences of conflicts may include sleeplessness, fear, anger, flashbacks, alcohol and drug abuse, domestic and sexual violence, suicide attempts, and suicide. Studies indicate that populations subjected to conflicts not only have psychiatric consequences, but also have associated dysfunctions that can last up to 5 years after the conflict. These persistent dysfunctions are linked to decreased productivity, poor nutritional, health, and educational outcomes for the children of mothers with these problems, and decreased uptake of donor development efforts. The failure to address psychiatric and psychosocial disorders in conflict-affected populations will likely hinder attempts to promote human and economic development and reduce poverty, and further exacerbate their psychiatric conditions (Mollica, 1999; Mollica, 2001).

The importance attributed to mental health worldwide has been significant in recent years. In 2001, the WHO's *World Health Report 2001—Mental Health: New Understanding, New Hope* emphasized the essential nature of mental health for the well-being of individuals, communities, societies, and countries (WHO, 2001) and was catalytic to new research studies of psychiatric disorders

in general and of postconflict populations in particular. Recent studies among Bosnian refugees in Croatia revealed high rates of depression (14% to 21%) and PTSD (18% to 35%). (Mollica et al, 2001). Psychiatric epidemiological studies undertaken in Afghanistan indicate a 67.7% rate of depression, 72.2% anxiety, and 72.2% PTSD (Cardozo et al, 2004; Scholte et al, 2004).

Of the 22 countries in the Eastern Mediterranean region, 5 are currently in a state of conflict. These are Afghanistan, Iraq, Palestine, Somalia, and Sudan. Consequently, 19% of the population of the region faces the threat and stress of conflict and war. Over the last two decades, 15 of the 22 countries have been involved in conflict. Thus, up to 85% of the total population of the region has been exposed to war in the last 20 years.

The WHO is addressing the challenge of the postconflict contexts on populations' mental health. The commitments were explicitly highlighted in the Resolution of the World Health Assembly (2002), which urged member states "to strengthen action to protect children from and in armed conflict" and, the Resolution of the WHO Executive Board (2002) which urges "support for [the] implementation of programs to repair the psychological damage of war, conflict, and natural disasters." A similar commitment has been made by the Eastern Mediterranean Regional Office of WHO (WHOEMRO 2002).

Conflict, violence, and mental health consequences

Conflict exposes populations to extreme violence and unprecedented levels of stress. The prolonged and often bloody nature of conflicts in many countries has had a profoundly negative effect on the psychological and psychiatric wellbeing of those populations. Killings, executions, massive persecution, forced internal displacement, the fear associated with living in mined areas, leave an indelible mark on the population. In addition to the conflict and war consequences in Afghanistan above-stated, the Lebanese war was very often fought in the civilian realm; therefore exposure to violence was common. Three out of 10 Lebanese surveyed report that a family member was killed during the conflict, 14% were wounded, 12% tortured, 7% report sexual assault, and 6% were kidnapped or taken hostage. The conflict that has continued in the Palestinian territories resulted in Palestinian children's exposure to traumatic events during the *Intifada* with a 38.1% high exposure, and 61.9% low exposure.

Conflicts, poverty, social capital, and mental health

Individual, interpersonal, institutional, and structural/societal factors may lead to, and perpetuate, violence within conflict situations. These relationships are well illustrated in *Figure 1* below (Moser and Shrader, 1999).

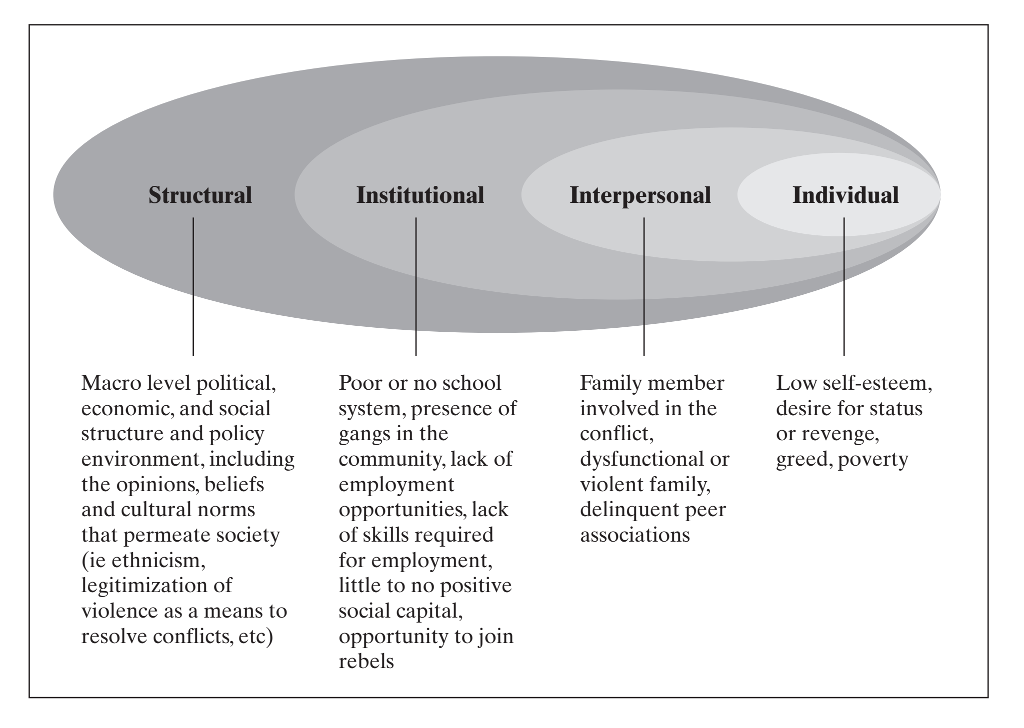


Figure 1. Integrated model for violence causality applied to conflict situations

Source: Caroline Moser and Elizabeth Shrader, *A Conceptual Framework for Violence Reduction*, Latin America and Caribbean Region Sustainable Development Working Paper No 2, (The World Bank, August 1999), 6.

The links between the individual, the interpersonal, the institutional, and the societal/structural become increasingly evident as nations that have high levels of poverty and are in economic decline are at increasing risk of conflict, and of increased psychiatric disorders and psychosocial distress. When conflict erupts, it increases poverty, thus undermining the countries' economic, governance, and service delivery capacities as well as increasing the risk for psychiatric disorders and psychosocial distress (Collier, 2003). Analysis of mental health and socioeconomic outcomes in Burundi indicates that psychosocial distress has a statistically significant relationship to poverty; that children in households where there is a person with a psychiatric disorder are unlikely to go to school; and that there is a strong protective relationship between level of education and psychosocial distress (Baingana, 2004).

Social capital, "the glue that holds societies together" (Dasgupta and Serageldin, 2000) exists at all levels of society, and can be used as a bridging mechanism to bring groups together, or as a bonding mechanism to strengthen the ties between members of existing

groups (Colleta and Cullen, 2000). Positive social capital enhances economic performance (Knack, 1999); improves households' welfare (Narayan and Pritchett, 1997) and households rich in social capital are more capable of enhancing their material wellbeing, and better able to obtain credit (Grootaert, 1999). It is at its greatest when social capital is used as a bridging mechanism to strengthen the relationships between existing groups (Narayan and Cassidy, 2001).

Mental health problems affect the ability of societies to generate positive social capital, a key element that enhances poverty reduction, human development efforts, and the wellbeing of populations. An inherent attribute of social capital is active community participation for collective action. If, due to mental illness, individuals are unable to participate in the activities of a community, they will be limited in accessing and contributing to the generation of positive horizontal (family and peer level) and vertical, in the suprastructures of society (social capital). The community also loses. A high prevalence of psychiatric disorders and psychosocial distress among its members weakens the community's ability to form relationships of trust, cooperation, and mobilization for collective action. A human and economic development objective needs to focus on the psychiatric and psychosocial wellbeing among postconflict populations, thus enhancing social capital. In turn, social capital accumulation can then become an effective protective factor, diminishing or preventing future psychiatric disorders and psychosocial distress (de Jong, 2002).

Additional postconflict factors that undermine social capital, increase poverty, and are catalytic for the development of psychosocial distress and psychiatric disorders include the break-up of families as a result of internal displacement, malnutrition, and death; the loss of community life; the break-up of health societal infrastructures in general, and health infrastructures in particular; and, the loss, through death or migration, of valued health professionals.

The economic impact of conflict on the countries involved is also staggering. The cost of the Iran-Iraq war, to Iraq, was over US $200 billion. Lebanon, in general, and Beirut especially, were busy and expanding financial centers until the onset of the 1975 war. The 15-year war left the country economically ravaged, investors unwilling to enter the country, and by 1990 Lebanon was US $35 billion dollars in debt. Consequently, the populations of both countries experienced increasing levels of poverty, poor health, and increased psychosocial distress and psychiatric disorders.

Conflict, women, children, and mental health

Women are two times more likely than men to experience PTSD (Kessler, 1995). Research in Afghanistan (Cardozo et al, 2004) indicates significantly poorer mental health for women than for men.

Women suffer from mood and anxiety disorders more frequently than men, are more likely to be poor, and thus at heightened risk for chronic psychosocial distress and psychiatric disorders. Gender-related aspects of conflict also affect child soldiers, women ex-combatants, victims of sexually based gender violence, and the culturally biased attitudes toward widows.

While there have been well-established international protocols dealing with child soldiers, there has been little effort to identify gender-differentiated needs. The implicit assumption had been that a child soldier is always a boy. Girls are generally not active in combat, but do play supporting roles in fighting forces (especially irregular armies) and have often been taken as sexual slaves, or have been subjected to rape and other forms of abuse. Others, who resist, may be beaten, disfigured, or killed. Girls who do manage to escape from their captors often face stigmatization and estrangement from their families, or are left with sexually transmitted diseases, and children resulting from repeated sexual abuse. Women who participate in fighting are more likely than men to experience symptoms of psychosocial distress and psychiatric disorders. American females who served in the first Persian Gulf War were three times more likely than their male counterparts to suffer from PTSD (Wolf, 1998).

Children born under these circumstances, surrounded by sustained stress, violence and trauma, as well as severe malnutrition, are at risk of severe cognitive impairments, and developmental deficits (de Jong, 2002). They are also at increased risk for birth injuries and communicable diseases that may also affect the brain (Silove, 2000).

WHO-EMRO Care Programs

It has been established that populations living in conflict and postconflict contexts are at a very high risk of developing psychosocial distress and psychiatric disorders. As a result of the high incidence and prevalence of such disorders, it has become imperative that in order to effectively respond to the care needs of such populations, training of paraprofessionals is an essential *sine qua non*. The WHO Eastern Mediterranean Regional Office has pioneered such initiatives involving the training and use of community resources such as teachers and volunteers to support and empower these populations at risk, using culturally acceptable forms of coping. This initiative has been presented in greater detail in a prior publication (Ghosh et al, 2004).

In Afghanistan, a vivid example of such paraprofessional intervention programs was developed by Coordination for Humanitarian Assistance (CHA), a non-governmental organization (NGO) that used an approach called "*focusing*" to alleviate the psychological distress of its Afghan aid workers. Focusing is similar to meditation, though not as deep. It hones in on the internal experience, and requires no disclosure. Traditionally, in

Afghanistan, it is shameful to openly discuss problems. Focusing allows work on painful psychological issues without creating ethical dilemmas of personal disclosures and possible breaches of trust. It also integrates Sufi imagery and poetry, and is easily associated with Islam.

In Lebanon, the *Education for Peace Program*, jointly undertaken in 1989 by the Lebanese government and UNICEF, involved the staff of voluntary organizations and youth volunteers in providing care. These efforts benefited thousands of children, and have been of immense value in relieving the psychosocial distress of war. The approach was to reestablish a sense of normalcy by providing education, educational materials, and to foster an environment in which wounds would heal naturally, rather than focusing on the child's emotional wounds.

The United Nations Relief and Works Agency (UNRWA) in Gaza started a prevention program to respond to the needs of the internally displaced persons and refugees during the second *Intifada* in May/June 2002. It involved 66 counselors working in schools, medical centers, community centers, and the refugee camps. The activities undertaken were at the prevention level, doing group counseling with parents, teachers, children, and adolescents. When indicated, professional referrals were made to the Gaza Community Mental Health Program. In Iran, a program for promoting life skills education has been implemented in a large number of schools. The emphasis in this project was on developing coping skills and increasing self-esteem, rather than on psychiatric disorders. It is a prototype of prevention and early intervention. A close link with primary care is also being developed as well to facilitate comprehensive care for those who need it.

Conclusions and future directions

The populations of countries in conflict and postconflict contexts experience complex emergencies (Mollica et al, 2004) and higher levels of psychosocial distress and psychiatric disorders. Consequently, they need special attention and early intervention to address these challenges. Field experiences indicate that large segments of these populations would respond well to culturally specific and sensitive interventions, while others may need primary care and comprehensive psychiatric interventions. It is very desirable to have available all these modalities. A brief synopsis of lessons learned and best field practices is herewith outlined.

First, there is a need to increase the populations' resilience. All people should have access to enhanced knowledge and skills regarding the management of stressful life events, and the tools to adopting healthy lifestyles. This public health, population-wide approach needs to be made available at the community level rather than at the hospital level.

Secondly, as there is increasing evidence of high correlation and risk factors

between the mother's distress and that of the child, a family approach should be the preferred one to achieve effective support and outcomes. Interventions must be developed to help rebuild the family by increasing communication among family members, strengthening family rituals and traditions, and sharing the experienced emotions.

Thirdly, community solidarity and traditional methods of support should be encouraged as often as possible at all times and particularly during times of conflict, especially as communities become fragmented through the massive loss of life and displacement. Thus, the rebuilding of community support networks is in fact a way of promoting the mental health of the population, and decreasing the risks of psychosocial distress and psychiatric disorders.

Fourthly, in addition to providing the correct information to the people about where and what kind of help is available, the media can be an important and positive influence in transmitting the mental health promotion messages to the general population, provided that they have been adequately translated by a professional/media collaborative team. The media need to be mindful of avoiding the inadvertent stigmatization of psychosocial distress, psychiatric disorders, or self-destructive behaviors.

Fifthly, mental health skills of caring for the population should be integrated with general social, educational, and primary care health services, including teachers, social service assistants, spiritual leaders, and health professionals, as well as influential community leaders. Recent lessons learned in South Asia and incorporated in the WHO recommendations for Mental Health in Aceh and during and after acute emergencies (Saraceno and Van Ommeren, 2005) resonate with this approach.

Finally, in rebuilding a resilient postconflict and postdisaster society, there is the temptation to implement short-term measures to alleviate suffering. It is essential that, in addition to the short-term measures, a mid- and long-term plan to build, rebuild, and expand essential mental health services, well integrated with primary care and public health at the primary, secondary, and tertiary prevention levels needs to become an integral part of rebuilding society and the country as a whole. As part of the mid- and long-range dimensions of a national or regional plan, the incorporation of lessons learned, best practices, and strategies for diminishing risk factors and enhancing protective factors should form a cohesive educational, services, research, and policy initiative that will lead to improving the populations' future health and mental health.

Abstract

Major disasters, human-made (conflicts, chemical accidents, and wars) and natural (earthquakes, floods, drought), have resulted in enormous death and destruction throughout the world over the centuries. In the past century, almost 200 million people lost their lives directly or indirectly due to collective violence, 60% of those deaths occurred among people not engaged in fighting (WHO 2002). Of the 22 countries in the Eastern Mediterranean region, 85% of the population have been affected by conflict in the past two decades. The result is a high prevalence of psychiatric disorders, most commonly depression, post-traumatic stress disorder, and anxiety. This chapter addresses populations' mental health in postconflict contexts with a global and Eastern Mediterranean focus. The increasing mental health needs of these populations in postconflict contexts and programs developed as a response are presented. Current risk factors are compared and contrasted with protective and preventive factors, as well as possible future directions.

Bibliography

1. Baingana F, Dabalen. A, Prywes M, Menye E, Rosholm M. Mental Health and Socio-Economic Outcomes in Burundi. HNP Discussion papers; 2004.
2. Cardozo BL, Bilukha OO, Crawford CAG, et al. Mental well-being, social functioning, and disability in postwar Afghanistan. *JAMA*. 2004;292:575-584.
3. Colleta NJ, Cullen ML. Resilient Communities: Building the Social Foundations of Human Security. In: *New Paths to Social Development: Community and Global Networks in Action*. Washington, DC, World Bank; 2000:35-46.
4. Collier PEL, Hegre H, Hoeffler A, Reynal-Querol M, Sambanis N. Breaking the Conflict Trap: Civil War and Development Policy. Washington, DC: Oxford University Press and the World Bank; 2000.
5. Dasgupta P, Serageldin I, eds. *Social Capital: A Multifaceted Perspective*. Washington, DC: The World Bank; 2000.
6. de Jong J. Public Mental Health, Traumatic Stress and Human Rights Violations in Low-Income Countries. In: de Jong, ed. *Trauma, War and Violence: Public Mental Health in Socio-Cultural Context*. New York, NY: Kluwer Academic/Plenum Publishers; 2002:1-91.
7. Ghosh N. Mental health promotion in post-conflict countries. *J R Soc Promotion Health*. 2004;124:268-270.
8. Grootaert C. *Social Capital, Household Welfare, and Poverty in Indonesia. Policy Research Working Paper*. Washington, DC; 1999.
9. Kessler RC, Sonnega A, Bromet E, Hughes M, Nelson CB. Post Traumatic Stress Disorder in the National Comorbidity Survey. *Arch Gen Psychiatry*. 1995;52:1048-1060.
10. Knack S. *Social Capital, Growth and Poverty: A Survey and Extensions. Social Development Department*. Social Capital Initiative Working Paper. Washington, DC; 1999.
11. Mollica R, Cardowo BL, Osofsky HJ, Raphael B, Ager A, Salama P. Mental health in complex emergencies. *Lancet*. 2004;364:2058-2067.

12. Mollica RF, Sarajilic N, Chernoff M, Lavelle J, Vukovic IS, Massagli MP. Longitudinal study of psychiatric symptoms, disability, mortality, and emigration among Bosnian refugees. *JAMA*. 2001;286:546-554.
13. Mollica R, McInnes K, Sarajlic N, Lavelle J, Sarajlic I, Massagli MP. Disability Associated with Psychiatric Co-morbidity and health status in Bosnian Refugees Living in Croatia. *JAMA*. 1999;282:433-439.
14. Moser C, Shrader E. A *Conceptual Framework for Violence Reduction. Latin America and Caribbean Region Sustainable Development Working Paper*. Washington, DC: The World Bank; 1999.
15. Narayan D, Cassidy MF. A dimensional approach to measuring social capital: development and validation of a social capital inventory. *Cur Sociol*. 2001;49:59-102.
16. Narayan D, Pritchett L. *Cents and Sociability—Household Income and Social Capital in Rural Tanzania*. Policy Research Working Paper. Washington DC; 1997.
17. Saraceno B et al. WHO Recommendations for Mental Health in Aceh. Geneva, Switzerland: World Health Organization; 2005.
18. Scholte WF, Olff M, Ventevogel P, et al. Mental well-being symptoms following war and repression in Eastern Afghanistan. *JAMA*. 2004;292:585-593.
19. Silove D, Ekblad S, Mollica R. The rights of the severely mentally ill in post-conflict societies. *Lancet*. 2000;355:1548-1549.
20. Sorel E. Violence Prevention and the Healing of Trauma. In: Christodoulou GN, ed. *Advances in Psychiatry*. Athens, Greece: Beta Medical Publisher; 2002:35-40.
21. Van Ommeren M, Saxena S, Saraceno B. Mental and social health during and after acute emergencies: emerging consensus. *Bull World Health Org*. 2005;83:71-77.
22. WHO. World Health Report 2001—Mental Health: New Understanding, New Hope. Geneva, Switzerland: World Health Organization; 2001.
23. WHO. *World Report on Violence and Health*. Geneva, Switzerland: World Health Organization; 2002.
24. WHO. Mental health: responding to the call for action, WHA55.10; 18 May 2002.
25. WHO. Strengthening mental health, EB109.R8; 17 January 2002.
26. WHO. Regional Office for the Eastern Mediterranean. Annual Report to the Regional Director; 2002.
27. Wolf J, Sharansky E, Reed J. Predictors of PTSD symptomatology among US female Persian Gulf war personnel. *J Interpers Violence*. 1998;13:40-57.

Eliot Sorel, MD, Clinical Professor of Psychiatry, 2121 K Street, N.W. Suite 800, Washington DC, U.S.A.
E-mail: sorel@aol.com

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Contemporary forensic psychiatry: a review

Julio Arboleda-Florez
Section of Forensic Psychiatry, World Psychiatric Association

Introduction

A summary of trends, or latest developments, in any area of science is usually a daunting task that is made much worse when the science in question spans a variety of fields involving clinical, sociological, legal, religious, or cultural aspects of the life of a large number of peoples from different countries and ethnic and cultural backgrounds. The task is made more daunting when the summary should include new scientific discoveries that might impact on the practice of a clinical science, its administrative regulations, or on the delivery of services to a specific population. Invariably, the risk is to end up with generalizations that do no justice to the scientific advances or to the peculiarities and idiosyncrasies of the way the science is practiced in different countries. Specifically in forensic psychiatry, while the scientific advances must impact everybody equally, to take advantage of them or to transfer them into daily practice would, understandably, vary according to the laws that govern the disposition of the mentally ill offender from country to country, the level of development of a particular country, and the way forensic psychiatric concepts and practices interact with the larger mental health system. Inevitably, therefore, and partly to comply with space regulations, this summarization of contemporary trends in forensic psychiatry will deal only with some general themes considered by the author to be of immediate relevance to scientists and clinicians worldwide.

The field of forensic psychiatry

The subspecialty of forensic psychiatry is commonly defined as the branch of psychiatry that deals with issues arising in the interface between psychiatry and the law. These issues cover the spectrum of criminal law, civil law, mental health legislation, justice and correctional systems and, of late, community corrections and community forensic psychiatry. These are extensive fields as they could be categorized into 3 major groups: The first group is composed of

issues found on entry into the legal system and that can be divided into 3 major areas—fitness to stand trial, insanity laws and dangerousness applications. The second group relates to issues within the different systems that interface with forensic psychiatry such as interrelations regarding hospitals for the non-criminally responsible defendants (hospitals for the insane) and prison hospitals. Finally, the third group pertains to issues on exit from the legal-correctional system such as mental health legislation, regulations within the general mental health system, and the phenomenon of the prison and hospital revolving doors for the mentally ill. The extensive relationships of forensic psychiatry have, in fact, produced a subset of functional classificatory definitions that, for reasons of space, are not spelled out in this paper, but the interested reader is requested to seek other publications on this subject (Arboleda-Flórez, 1999).

Similarly, since there is insufficient space to review each of the areas and fields of forensic psychiatry, this review will not attempt to cover them, but rather will concentrate on 5 major topics: scientific advances in forensic psychiatry, commitment laws, laws pertaining to mentally ill defendants (dispositions on insane criminals), disposition of the mentally ill offender and human rights of offenders.

The latest scientific advances in forensic psychiatry can be subsumed into two major categories, those that pertain to classification of offenders and violent mentally ill persons in relation to the degree of violent risk that they might pose to the community (Stuart, 2003) and findings in the neurosciences, more specifically on neuroimaging and the impact of neurotransmitters on specific violent behaviors.

Risk assessment

The prediction, assessment, and management of violent behavior have always being a major concern for forensic psychiatry. Overblown public fears that mentally ill persons are intrinsically violent have placed demands on psychiatry and, more specifically forensic psychiatrists, to predict the risk. While for many years it was felt that predictions of violence made by clinicians were, at best, about the same level as predictions made by anybody else, the development of risk prediction scales seem to have changed this perception, and a large number of instruments have been developed over the past decade intending to provide better tools for such prediction (Lewis and Webster, 2004). A debate as to which one was a superior system of prediction, the “clinical or dynamic method”—referring to the use of clinical insights and predicting elements gathered during clinical interviews—or the “actuarial or static method”—referring to the use of risk assessment instruments that tend to be based on actuarial phenomena developed from statistical frequencies of criminal conduct in the past—has subsided, and clinicians are advised to use both systems in order to increase their abilities to properly

assess violent risk. The emphasis has also changed from predicting violence to assessment and management of risk.

Neuropsychiatry

Neuroimaging has brought more into focus the fact that there is a basic physiological substratum to criminal behavior and that there may be an age differential to criminal behavior (Beckman, 2004). By the same token, much research on neurotransmitters, especially serotonin, has shown how these substances can have impacts and determine the explosion of violent behavior (Crowner, 2000). Neurological research on post-traumatic stress disorder and on sleepwalking has also thrown some light into the neurological substratum to these and other conditions of importance in forensic psychiatry.

Commitment laws

There is an inextricable bond between commitment laws for the mentally ill and insanity laws. The bond manifests itself at the point of entry into the justice system or at the exit point from the correctional system. On entry, to many commentators, the deinstitutionalization of the mentally ill, the closure of mental hospitals, the difficulties in securing a bed for emergency admissions to general hospitals, and the tightening of commitment laws are at the root of the criminalization of the mentally ill. According to this view, the large number of unattended and untreated mentally ill in the streets inevitably leads them to commit crimes, many petty in nature, but serious and catastrophic on occasion. On exit, the major debate pertains to dispositional issues once a mentally ill offender is due for release from prison or from prison hospitals for the insane.

For many decades, the laws governing the commitment of the mentally ill were couched in a language of care and protection that assumed that the state had a role in helping those in need because of a mental condition. This *parens patria* attitude led to patients being placed in hospitals, usually large mental hospitals in secluded and beautiful campuses located in small towns, on the basis that they were in need of treatment, protection, and care. Controls on who was committed, for what reasons, for how long, under what conditions, and to what type of treatment, were lacking and abuses developed (Wyatt versus Stickney, 1972). In addition, three other factors led not only to increase the control on commitment laws, but also, eventually, to close most of the mental hospitals—a number of sociological studies (Goffman, 1961) that drew attention to the ill effects of prolonged institutionalization, the introduction of psychotropic drugs in the 1950s that ended centuries of therapeutic nihilism and that brought hope that there could be alternatives to a custodial model of care based in asylums (Mechanic, 1980), and more recently, financial restraints have driven health reformers to advocate for outpatient and community alternatives to any kind of hospitalization (Crichton et al, 1990).

Most present day commitment laws are based on the *police power* of the state to protect citizens from dangers posed by others. Mental health legislation based on police power tends to downplay the need for treatment and care and assume that commitment should only be used in situations where the mental patient is dangerous to himself/herself or others. Given the need to control political and power abuses when police power is invoked, most jurisdictions require either a legal determination, or provide for an elaborate appeals process before a person could be placed in a mental institution involuntarily. Modern mental health legislation also includes clear definitions of mental illness, specify the legal test to be met, and stipulates periods, places, and conditions of commitment so as to safeguard the civil rights of patients.

Concerns have been expressed that commitment laws have become too restrictive to apply and they have been given as reasons for "forensic revolving doors" either in acute psychiatric units or in prisons. Typically, the patient is committed, improves under treatment while at the hospital, is discharged, stops the medication, relapses, commits a crime, is remanded to a forensic unit, is treated, improves, and is discharged to start the cycle again and, eventually to be sent to prison, over and over again. Furthermore, it seems that receiving a label of "forensic" means that the patient gets stuck in a sort of "forensic ghetto" from where it is difficult to migrate back to the general mental health system. (Ontario Ministry of Health and Long Term Care, 2002). The use of assertive community treatment teams and outpatient commitment legislation has been promoted as service delivery modalities that could stop the revolving door phenomenon. Under these statutes, a patient is expected to abide by a treatment regimen for a period of time following discharge, failing which, the patient is returned to hospital (Bindman, 2002).

Insanity laws

Many offenders are remanded to forensic units for fitness assessments. These are evaluations to determine if the person has any mental disorder that could impair the capacity to continue with the legal process. If it is determined that the person is not fit, hospitalization and treatment are ordered until the person regains the capacity and is returned to Court to continue the process. By far, however, the great majority of offenders who undergo a fitness assessment are found fit to stand trial. While very few are found unfit, the fact is that fitness to stand trial evaluations are also used as a preliminary step to assessment of insanity, but similarly, few defendants are found insane. An acquittal on the basis that the person was mentally ill at the time of the offense has to be based not only on the fact that the person was mentally ill, but that at the moment the act was committed, the person had lost the capacity to act rationally. Ever since the introduction of the McNaghten rules in England in 1843, many other standards have been devised to enshrine this principle into law. The

McNaghten rule, however, that "to establish a defense on the ground of insanity it must be proved that, at the time of the committing of the act, the accused party was labouring under such a defect of reason, from disease of the mind, as to not know the nature and quality of the act he was doing; or, if he did know, that he did not know he was doing what was wrong" (East, 1927) is used, with minor modifications in many countries. In the United States, however, the shooting of President Reagan by John Hinckley in 1984 and his subsequent acquittal on the bases of his mental condition, led to calls for the abolition of the insanity defense. Several states have done so, most notably Nevada, Montana, Idaho, and Utah. Nevada, for example, abolished the defense in 1995 and enacted a statute for a finding of "Guilty but Mentally Ill" (Miller, 1996). It is too early yet to assess the impact of these changes.

Regulations on disposition

The way the mentally disordered person is routed into forensic systems and prison is the subject of much debate and soul-searching. This debate hinges on how best to deliver good quality psychiatric services in the community to prevent rehospitalization, and to prevent the entrance of the patient into the forensic system (Arboleda-Flórez, 2003). Entering the system is referred to as criminalization which, therefore, could serve as a mental health outcome indicator of the failure of the general mental health system. On the other hand, debates also rage on what could be the best way to deliver services when an offender exits the justice-correctional system. The question is how best to prevent that mentally ill offenders relapse into their mental condition, or relapse into criminality after they are discharged into the community. Public safety considerations dictate that measures are in place before dangerous offenders are released. In many jurisdictions, apart from placing the ex-offender on community supervision, arrangements are made to organize psychiatric services in the community before the person is actually released.

Lately, there has been a trend in Canada and the United States to use mental health legislation to commit to mental hospitals offenders who are due for release, but who are still considered mentally ill and dangerous. Unfortunately, this welcome trend that uses civil law mechanisms for the management of the seriously mentally ill offenders has also been seen as a solution for the management of extremely violent persons, especially dangerous sexual offenders. Apart from stretching the concept of mental illness by psychiatrizing behaviors that otherwise should be considered criminal, this development could become a major misuse of the precious and scarce human and financial resources available in the mental health system.

Human rights of offenders

Along the developments in science, new legal concepts, and new mental health delivery systems, advances have been obtained on the protection of the rights

of mentally ill offenders and, especially, prisoners. The different UN Declarations on the protection of the rights of the mentally ill and of prisoners have had major impacts on how forensic psychiatrists conduct their assessments and legal evaluations. The UN Declarations have been followed by Guidelines from the World Health Organization, notably Principle 20 on Criminal Offenders on the Guidelines for the Promotion of Human Rights of Persons with Mental Disorders (World Health Organization, 1996) and Principles 3 on Mental Health Assessments, 7 on the Availability of Review Procedures and 10 on Respect of the Rule of Law of the Ten Basic Principles promulgated by the WHO (World Health Organization, 1996). Together with many papers on the ethical principles associated with the practice of forensic psychiatry (Taborda, Abdalla-Filho, 2002), these documents make a statement of what is expected from forensic psychiatrists as they go about in conducting their legal evaluations and preparing their submissions to courts of law.

Conclusion

Five major aspects of the interface between law and psychiatry have been reviewed in this chapter. Because of space limitations, many could not be included. However, together, these 5 areas provide a window from which to assess the many contemporary issues affecting the work and activities of forensic psychiatrists worldwide.

Bibliography

1. Arboleda-Flórez, J, Deynaka C. *Forensic Psychiatric Evidence*. Toronto, Canada: Butterworth; 1999.
2. Arboleda-Flórez, J. Integration initiatives for forensic services. *World Psychiatry*. 2003;2:180-183.
3. Beckman M. Crime, culpability, and the adolescent brain. *Science*, 2004;305:596-599.
4. Bindman J. Involuntary outpatient treatment in England and Wales. *Curr Opin Psychiatry*. 2002;15:595-598.
5. Crichton A, Hsu D, Tsang S. *Canada's Health Care System: Its Funding and Organization*. Ottawa, Canada: Canadian Hospital Association Press; 1990.
6. Crowner ML, ed. *Understanding and Treating Violent Psychiatric Patients*. Washington, DC: American Psychiatric Association Press; 2000.
7. East WN. *An Introduction to Forensic Psychiatry in the Criminal Courts.* New York, NY: William Wood and Company; 1927:56.
8. Goffman E. *Asylums: Essays on the social situation of mental patients and other inmates*. Garden City, NY: Doubleday; 1961.
9. Lewis AHO, Webster CD. General instruments for risk assessment. *Curr Opin Psychiatry*. 2004;17:401-405.
10. Mechanic D. *Mental Health and Social Policy*. Englewood Cliffs, NJ: Prentice Hall; 1980.
11. Miller RD. Recent changes in the insanity defense in the United States. *Int Bull Law Mental Health*. 1996;6:33-34.

12. Ontario Ministry of Health and Long Term Care—Forensic Mental Health Services Expert Advisory Panel (Arboleda-Flórez J, Chairman) *Assessment, Treatment and Community Reintegration of the Mentally Disordered Offender* – Final Report. Toronto, Canada: PAGES Publishing; 2002.
13. Stuart H. Violence and mental illness: an overview. *World Psychiatry*. 2003;2:121-124.
14. Taborda JGV, Abdalla-Filho E. Ethics in forensic psychiatry. *Curr Opin Psychiatry*. 2002;15:599-603.
15. World Health Organization. *Guidelines for the Promotion of Human Rights of Persons with Mental Disorders*. Geneva, Switzerland: World Health Organization; 1996.
16. World Health Organization. *Mental Health Care Law: Ten Basic Principles*. Geneva, Switzerland: World Health Organization; 1996.
17. *Wyatt v Stickney*, 344 F. Supp. 373, 344 F. Supp. 387 (M.D. Ala), 1972

Julio Arboleda-Florez, Professor Emeritus, Head, Department of Psychiatry, Queens University, Canada.
E-mail: ja9@post.queensu.ca

Education

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Education in psychiatry

Linda Gask, David Baron, Rodolfo Fahrer
Section on Education in Psychiatry
World Psychiatric Association

Education in psychiatry poses as great a challenge now as at any time in the last 50 years. Education plays an important part in every branch of the specialty. However, in a climate where the specialty is dominated by research, the role of the teacher is probably less well regarded in academic institutions than it has been at almost any time in our history.

In this chapter, we will provide a state-of-the-art update concerning the educational task in psychiatry. This covers five major areas of work; however, we will focus primarily on the first three of these:

- Undergraduate education
- Postgraduate training in psychiatry
- Education of nonpsychiatrists including primary care physicians
- Public education and public health initiatives
- Patient education and promotion of self-management

The World Psychiatric Association (WPA) has produced educational initiatives in a number of these areas. We will review the field and consider what further research and development initiatives are needed.

Teaching psychiatry to medical students

In all countries, there has been an attempt, under the auspices of the WPA, to standardize undergraduate psychiatric training and improve its quality. All medical students receive some instruction in psychiatry, but this varies considerably across the world and even between medical schools in developed countries. The WPA and the World Federation for Medical Education have produced a core curriculum for undergraduate training in psychiatry (World Psychiatric Association, 1998) and there is at least a recognition now that, although the majority of those practicing as doctors will not undertake any postgraduate training in psychiatry, many patients in the community, particularly those seen in general practice and in general medical settings, will have some degree of psychological distress. Therefore, the psychiatry that is taught in the medical undergraduate curricu-

lum must be appropriate to provide an adequate basis for a large number of different specialties, and also specifically for the needs of the pre-registration house officer. But what constitutes a core curriculum in psychiatry? What are the core psychiatric skills that all doctors should acquire? A survey of medical schools in the UK and Ireland (Ring et al, 1999) reviewed the core conditions and skills for teaching in the undergraduate psychiatric curriculum in psychiatry (see *Boxes 1 and 2*). Respondents agreed that it was important that students demonstrate a commitment to maximizing the social integration of patients with mental health problems and be sensitive to patient concerns about the stigma attached to mental illness. Currently medical students in the UK receive about 20 hours of lecture time devoted to psychiatry in addition to a mean of about 16 hours of small group teaching. Students also spend time "clerking" patients (taking a psychiatric history and completing a mental state examination of the patient) and presenting cases to teaching staff.

Compared with the past, medical students spend a lot more time out in the community with other mental health professionals and also have the opportunity to learn about psychiatry during

Box 1. Conditions thought by >85% of respondents to a questionnaire sent to medical schools in the UK and Ireland to represent core psychiatric conditions that medical students should be taught about. (from Ring et al, 1999).

- Acute confusional states and dementias
- Affective disorders
- Anxiety, panic, and phobias
- Conduct and emotional disorders of childhood and adolescence
- Obsessive-compulsive disorder
- Schizophrenia
- Substance misuse and dependence.

Box 2. Skills thought by >85% of respondents to a questionnaire sent to medical schools in the UK and Ireland to represent core psychiatric skills that medical students should be taught. (from Ring et al, 1999).

- Ability to communicate effectively with mentally ill patients of all ages and developmental levels
- Ability to take a full psychiatric history and mental state examination
- Ability to formulate a differential diagnosis
- Ability to consider family relationships and their impact on individuals
- Ability to perform physical and simple psychological investigations in patients presenting with psychological symptoms
- Ability to assess suicidal risk

their primary care attachments; however, this depends on the skill and interest of the primary care doctor to whom they are attached. Primary care and general medical care may be particularly important settings where students can learn about mental health issues in poorer countries where specialist services are limited. However, it is essential that we also combine this with more research into what students do actually learn in these settings, and what attitudes they acquire.

Modern methods

Use of problem-based learning strategies in psychiatry is growing, and there is some evidence that this model of teaching is more effective for psychiatry (van Diest et al, 2004), but there is still a dearth of tutors who are adequately trained in facilitating small group teaching. In psychiatry, as in other specialties in medicine taught in the undergraduate curriculum, there is a pressure to move away from overloading students with facts and to employ new approaches. In the USA, these have included clinical-case–based lectures and integrated teaching with neuroscience, neurology, and neurosurgery. The Objective Structured Clinical Examination (OSCE), in which there may be one or more psychiatry "stations," has replaced the traditional psychiatric clinical examination in many countries, although some student may still face the possibility of meeting a patient with a mental health problem in the "long case" in their final examination. Standardized patients (trained volunteers who can role-play one or more cases) play a part in both teaching sessions (where students learn psychiatric interviewing skills) and in OSCEs. In the UK, users of mental health services have begun to play a role as cotutors for undergraduates.

Attitudes and recruitment

There is evidence that the experience medical students have in psychiatry influences their choice of psychiatry as a profession. Students at different medical schools in the UK have markedly different rates of choosing psychiatry as a career, with an average of about 4% of students making it their first choice. The movement towards recruitment of equal numbers of women and men into medical school might potentially have a positive impact on recruitment, as female students do seem to have more positive attitudes towards psychiatry and are more likely to opt for psychiatry as a career choice. However, recruitment into psychiatry has become more problematic over recent years in many countries, particularly the UK and USA.

The most likely alternative career for students interested in psychiatry is general practice, and many students who seemed to excel in psychiatry as medical students in Manchester were found to have chosen general practice as a career. Students may perceive psychiatry as not only different from other medical specialties, but also somehow inferior. Some students may view psychiatry as less scientific basis and too

inexact. In addition, others may be negatively affected by working with patients who experience minimal or no recovery from their illness. This was highlighted by Ellis 40 years ago (Ellis, 1963) who declared that: "the fact that 40% of British hospital beds are occupied by psychiatric patients will never lead students to be interested in psychiatry as will some therapeutic advance which empties these beds."

The new medical curricula around the world have introduced students to patients with mental health problems earlier in their career and in a wider range of settings. Ideally they should therefore be inculcated with psychiatric knowledge and skills at a time when they are more receptive to new ideas. In addition they may better appreciate the links between psychiatry and the rest of medicine. There are, however, downsides to this approach. In a problem-based learning curriculum students need tutors who understand the importance and relevance of psychosocial issues in patients who also have serious medical problems. Otherwise, the opportunities for learning about mental health will be missed, and it is possible that students will simply acquire the negative attitudes of their teachers. There is now much less time spent actually in "apprenticeship" mode with working psychiatrists in the curriculum. This is a problem given the importance of positive undergraduate teacher role models when choosing future career paths. As a consultant psychiatrist stated about the current teaching schedule at his University: "We don't get a chance to get to know our students" (Gask, 2004).

Emphasizing the biological aspects of psychiatry has been one strategy utilized in attracting more students to consider a career in psychiatry. Another might be more opportunity for liaison psychiatry attachments in training. This might help psychiatry appear more relevant to the rest of medicine. It is crucially important that students observe that psychiatric treatment can indeed be effective. They need to see people with common mental health problems in the community receive evidence-based and effective treatment. They also need to recognize the importance of interventions to improve quality of life for people with long-term mental health problems. Here, parallels with models of care for other chronic disorders like diabetes may be helpful. Psychiatry needs to be perceived as an important specialty within the medical school and the stigma towards the subject believed by some students needs to be challenged head-on. Teachers should take every opportunity to emphasize the benefits of a career in psychiatry and actively recruit outstanding students.

Training future psychiatrists

In 1971, Denis Hill pointed out that a psychiatrist should be: a physician, a scientist, a psychotherapist, and a leader. In the 1990s, we postulated that in addition to these attributes, a psychiatrist should also be a teacher, and be able to

work with multidisciplinary teams. Today, in addition to the aforementioned, a psychiatrist must also acquire knowledge and skills in the current advances in neurosciences and neuroimaging.

Program Requirements for Residency Education in Psychiatry

A graduate from residency education in psychiatry must be able to:

- Develop skills for the prevention, diagnosis, treatment, and prognosis of psychopathological disorders in the different health services and in the community.
- Incorporate and integrate clinical, therapeutic, relevant, and updated epidemiological knowledge in the field of general psychiatry, consultation liaison psychiatry, and community psychiatry.
- Manage biological treatments.
- Manage care through the use of multilevels of care such as day hospital, intensive outpatient care, home treatment.
- Use techniques of time-limited psychotherapeutic approach for the treatment of: individuals, groups, families, couples, and community intervention.
- Employ techniques for intervention, treatment, and referral to emergency psychiatry.
- Manage theoretical and methodological aspects for clinical and epidemiological research.
- Be versant in concepts and procedures for the primary health care of mental health.
- Use and employ concepts and didactic tools for curricular development.
- Work with multidisciplinary teams to integrate basic, clinical, and social knowledge.

An example of a new residency training program in Argentina can be found in *Box 3*.

Modern educational programs demand, apart from faculty commitment, new teaching methods, particularly problem-based learning (see above), requiring the active participation of the resident, and stimulation for him or her to actively research problems and be responsible for their own learning. At present, postgraduate training is moving much slower than undergraduate medicine in modifying its teaching methods. However, there has been improvement in the development of competency measures, particularly in the USA.

Although psychiatry was at the forefront of the teaching of communication skills both at an undergraduate and postgraduate level in the 1970s and 1980s, this reservoir of expertise has largely disappeared with the rise in biologically orientated research and the changing faculty within psychiatric departments in medical schools. Communication is central to the role of the psychiatrist. In some countries, OSCE examinations have been introduced into postgraduate examinations. Generally these do not adequately examine communication skill, but rather “knowledge gathering” in brief history taking tests and the abil-

ity to provide an adequate "explanation" for, rather than a "negotiation" with a patient.

The trainee's experience

Four years ago, Tanya Luhrmann, an anthropologist, published a fascinating anthropological study of psychiatric training in the USA. She interviewed psychiatry residents on two different training programs in the USA over a period of 10 years during the 1990s. She comments: "Medicine trains its students by having them act as if they are competent doctors from their first days on the job. Although psychiatric residents are 'in training,' they are also acting—from the day they arrive—as psychiatrists" (Luhrmann, 2000, p 26).

Through her interviews with US psychiatrists in training, Luhrmann observed how psychiatrists learn how to diagnose and treat mental disorders in a US system that has taken classification in psychiatry

Box 3. Example of a new training program for psychiatry residents in the Argentina Educational Program.

The educational program will have a duration of 4 years, with a total timetable of 13 800 hours, 45 weekly shifts, 24 hours a week.

The training activity will be carried out in accredited programs with a timetable from Monday to Friday from 8 to 5 PM, with participation in theoretical and practice seminaries not more than 20% of the total time dedicated to training.
The 4 years of the specialization course in psychiatry are divided in modules of theoretical practical experience of different lengths. The resident will be trained in psychotherapeutic, biological, and community treatment both in the psychiatric hospital as in the general hospital.

1 – Partial rotation in internal medicine.
2 – Partial rotation in neurology.
3 – Rotation in psychiatric hospital with inpatients and outpatients. The resident will work in rehabilitation and in the emergency services. In both cases, he/she will be in contact with the community and with the practice of community psychiatry.
4 – Activities in consultation liaison psychiatry, minimum 6 months, with inpatients and outpatients of the various services of the general hospital. This period includes 1 month in intensive care, surgical intensive care, and coronary care.
5 – Rotation in child psychiatry or in disabled.
6 – Rotation in treatments for addicts (up to a maximum of 6 months).
7 – Rotation in psychopharmacology (up to a maximum of 6 months).
8 – Optional participation in a program of addictions, forensic psychiatry, gerontopsychiatry, mental retardation, psychotherapy, family therapy (up to a maximum of 6 months).

to new heights of complexity. She described how a young doctor she calls "Gertrude" is initially uncomfortable with the lists and categories that she needs to know in order to make a diagnosis using the *DSM*. Later, "because of the way she has been trained, Gertrude acts as if she believes that psychiatric illnesses pick out real and discreet disease processes in the body. She talks about figuring out what is going on with the patient the way an ophthalmologist talks about figuring out if the patient has a corneal erosion. At the same time, her primary practical concern is with what medication to prescribe..." (Luhrmann, 2000, p 49). However her most interesting observations come when she compared and contrasted how residents learnt in a biologically orientated unit when compared to an inpatient psychotherapy service (of a type almost extinct now in the UK and the USA).

On the biological unit, she notes that doctors had more authority and the young doctors were not resented by other staff because there was "no question—given the biomedical model of illness—that the psychiatrists knew more about the patient's problems than any other staff members did" (Luhrmann, 2000, p 132). The ethos of the unit was to help patients understand they were very sick and to help them get better. The junior doctors learned about the need to adopt a professionally "paternal" medical view in managing patients who were "very ill," in addition to the importance of educating to public that psychiatric illness is "real" and misunderstood. This was quite different from what they learned from psychotherapy. Here, the emphasis was on the similarity between people who have "mental health problems" and everyone else and importance was placed on self-determination and taking responsibility. Luhrmann found that psychiatrists have to learn both medical and psychotherapeutic approaches to treatment and integrate these in one way or another. Both models carry with them different assumptions about what causes mental illness, how to manage it, and how a person with a mental health problem will eventually recover over time.

"Psychiatry is straightforward when a person is starkly crazy, very psychotic. You know you cannot trust what he says about himself. A doctor knows he has to be in charge, the way a mother is in charge of her child and makes decisions for him (no ice-cream before dinner) that violate his wants and yet are better for him in the long run. It is easy to say that there is an illness affecting that person's judgment. But it's not like that, if a patient is depressed but says she's fine now and wants to leave, or, as this young man said, he thinks that psychiatric medication slows down his thoughts and he doesn't want to write his dissertation on lithium, how does a doctor decide who really knows best? Who gives the young psychiatrist the authority to say, 'you're more depressed than you think'? That 'you have an illness that impairs your thinking and so I cannot believe what you say?'" (Luhrmann, 2000, p 138).

Luhrmann's study is particularly fascinating, covering as it does a period of considerable cultural change in American psychiatry with the rise of managed care and biological psychiatry. Anthropological methods have much to contribute to research in psychiatry and appropriate qualitative methods could be used more frequently alongside qualitative approaches to evaluate educational programs and the development of new methods.

Cross-national variations

Considerable variations exist between countries in the way they teach and assess psychiatry. In some countries, training lasts considerably longer than in others, and there is particular variation, even within European countries, in the emphasis on psychotherapy training and the degree of competence in particular schools of therapy that the trainee must attain. This is of considerable concern to psychiatrists in training within Europe who want to be able to move more freely between countries and have their qualifications recognized. The WPA recently also produced a core curriculum for postgraduate training (World Psychiatric Association, 2002), although it remains unclear how training bodies around the world will respond to such guidelines. More research is needed into how such variations develop and influence the quality of care provided to patients.

In some countries, there is a shortage of posts for training in psychiatry. This is true in some European countries, where (in contrast to the UK) competition can be fierce for training posts. In some Latin American countries, for instance, in Argentine, there is a significant grade of frustration for 75% to 80% of graduates who find it impossible to enter a psychiatric residency and, therefore, do not attain their postgraduate medical training.

Education of nonpsychiatrists—including primary care

The importance of training nonpsychiatrists about mental health has been recognized by the WPA over the last decade with the production of a number of education packages, and a growing literature from around the world on interventions in primary care (for example, Odejide et al, 2002). Some educational interventions, such as the STORM package on training in suicide assessment and management developed in Manchester, can be adapted for a range of professionals from staff in the emergency room to primary care and mental health workers in the community (www.STORM.man.ac.uk).

Vikram Patel (2003) has produced a superb training manual *Where There Is No Psychiatrist*, which provides a practical guide for community and primary care workers in developing countries. A training package designed specifically to help those working with primary care physicians to develop training programs for primary care workers using modern educational methods proven to lead to acquisition of skills *(Box 4)* was launched

at the WPA meeting in Yokohama by Prof Sir David Goldberg and Dr Gask. A reprinted version with example videotape material in DVD format will be available later in 2005. Many educational interventions in primary care continue to be inappropriate in content, and to contain material more suitable for postgraduate psychiatric training. Primary care materials need to be practical, flexible, contain the basic knowledge that a first-line professional needs to know, and to provide plenty of opportunities for role-play and discussion. Interventions are probably more effective if carried out in collaboration with primary care teachers, and if supported by follow-up "booster" sessions. However, although there is considerable evidence that training primary care workers leads to changes in knowledge, attitudes and skills, there is a lack of evidence for impact on patient outcome (Hodges et al, 2001).

A systematic review of educational and organizational interventions to improve the management of depression in primary care published in 2003 concluded that "commonly used guidelines and educational strategies are likely to be ineffective." The implementation of the findings of this research will require substantial investment in primary care and a major shift in the organization and provision of care (Gilbody et al, 2003). What this essentially means is that educational interventions including training courses and the dissemination of protocols and guidelines alone are *ineffective—at least in the developed countries where the research reviewed has been carried out*. Here, changes to the organization of care which combine education and guidelines with approaches derived from chronic disease management, including systematic follow-up, improved community linkages, and better links with specialist services to provide support, will be needed to achieve better outcomes. The chronic care model, which has been adapted for international use by the WHO (www.who.int/chronic_conditions/en/), provides a basic model around which such complex interventions can be built *(Figure 1)*. Education is an essential component, but not sufficient alone to produce change. The task of changing whole systems and working with a range of health care providers and patients to bring about such system change may provide a new and challenging role for educators as simply lecturing about new models will be insufficient to ensure their effective introduction. The skills of group facilitation will

Box 4. Modern methods for training primary care workers to acquire mental health skills.

- *Brief* lecture presentations using overhead projection or slides
- Discussion–triggered by videotaped example interviews
- Modeling of new skills by watching video
- Role-play–in pairs or trios (with third person as observer)
- Video feedback one-to-one or in a group setting.

be required to introduce these new ideas and the technology of collaborative interventions (see the "breakthrough series model" in *Figure 2*) is now being successfully applied to introduce these ideas particularly in North America (see www.improvingchroniccare.org, for much more information and web links on collaboratives).

Research evidence for the impact of educational interventions in developing countries is currently lacking and it remains to be seen whether educational interventions alone have as limited effect in these settings, where baseline levels of skills and knowledge with respect to mental health may, on average, be lower than in some of the developed countries.

Public health education

In the last 20 years, there have been a series of local, national and international campaigns, most of these focused on such topics as suicide, depression (Defeat Depression and DART in the UK and USA) and on reduction of stig-

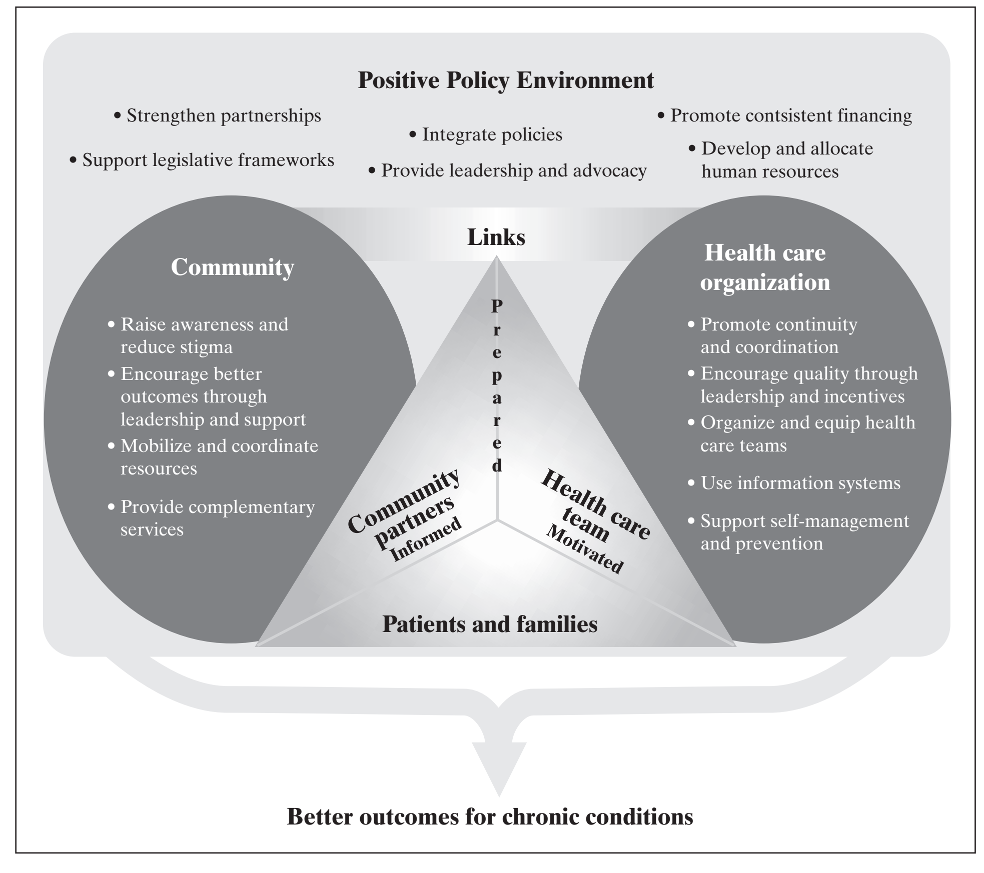


Figure 1. WHO model for improving chronic care.

ma (for example, the WPA campaign). The impact of such campaigns is unclear, although there is some limited evidence of an impact on attitudes and knowledge (Kitchener and Jorm, 2002 [Mental health first aid training]; Hegerl et al, 2003). What is lacking in the literature is evaluation of interventions that coordinate education of primary care physicians with public education campaigns. This has been attempted to some degree (for example, in the Defeat Depression campaign in the UK), but was probably most successful in the Gotland study (Rutz, 2001) where education of primary care physicians about depression took place at the same time as increased public awareness about suicide and depression. This has never been successfully replicated, but the intensity of this intervention, with impact both on physicians and the community, is rarely achieved.

Education for self-management

Self-management strategies may be effective for common mental health problems (Bower et al, 2001) and have also been utilized widely in psychosis (for management of "voices") and in addictions. A promising future area of interest in psychiatric education is how we can:

- Develop effective self-management materials for a range of disorders in collaboration with patients and users of mental health services.
- Help mental health and primary care workers to acquire the skills necessary to promote the effective use of such materials.

Simply handing out materials to patients is unlikely to be as effective as collaboratively working through them,

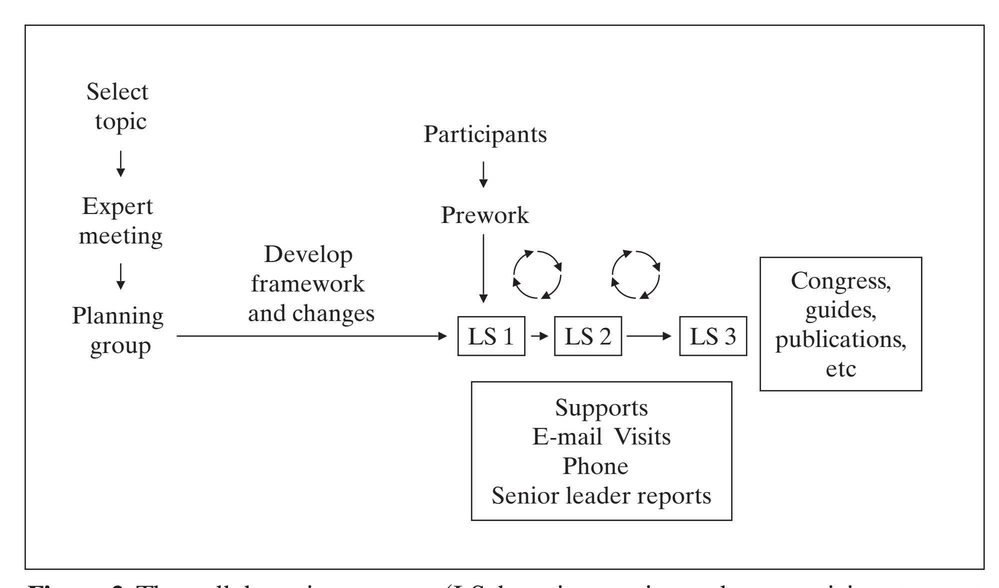


Figure 2. The collaborative process (LS, learning sessions where participants meet to share ideas/experience).

providing opportunities for education and discussion. However, there is a dearth of evidence about how we can train health workers to promote self-management in mental health or indeed in other conditions. Given the world-wide shortage in access to psychological therapies provided by mental health workers, and the limited time that both primary and specialist therapists have to spend with patients, the development of such materials and education for professionals in how to use them seems to be an important step forwards.

Conclusion

This chapter has focused on the role of undergraduate and postgraduate medical education in psychiatry, and the training of nonpsychiatrists in mental health skills. However, education also has a part to play in the education of the public about mental health and the development and promotion of self-management tools in mental health care. Priorities for research and development in psychiatric education should consider all of these domains, and the considerable potential for interaction between them.

Bibliography

1. Bower P, Richards D, Lovell K. The clinical and cost-effectiveness of self-help treatments for anxiety and depressive disorders in primary care: a systematic review. *Br J Gen Pract*. 2001;51:838-845.
2. Van Diest R, van Dalen J, Bak M, et al. Growth of knowledge in psychiatry and behavioural sciences problem-based kearning curriculum. *Med Educ*. 2004;38:1295-1301.
3. Ellis J. The teaching of psychiatry. *BMJ*. 1963;2:585-588.
4. Gask L. *A Short Introduction to Psychiatry*. London, UK: Sage; 2004.
5. Gilbody S, Whitty P, Grimshaw J, Thomas R. Educational and organizational interventions to improve the management of depression in primary care: a systematic review. *JAMA*. 2003;18:3145-3151.
6. Hegerl U, Althaus D, Stefanek J. Public attitudes towards treatment of depression: effects of an information campaign. *Phamacopsychiatry*. 2003;36:288-291.
7. Hodges B, Inch C, Silver I. Improving the psychiatric knowledge, skills and attitudes of primary care physicians, 1950-2000: a review. *Am J Psychiatry*. 2001;158:1579-1586.
8. Kitchener BA, Jorm AF. Mental health first aid training for the public: evaluation of a course on knowledge, attitudes and helping behaviour. *BMC Psychiatry*. 2002;2:10.
9. Luhrmann TM. *Of Two Minds: The Growing Disorder in American Psychiatry*. New York, NY: Alfred A. Knopf; 2000.
10. Odejide AO, Morakinyo JJ, Oshiname FO, et al. Integrating mental health into primary care in Nigeria. *Seishin Shinkeigaku Zasshi*. 2002;104:802-809.
11. Patel V. Where *There Is No Psychiatrist: A Mental Health Care Manual*. London, UK: Gaskell; 2003.
12. Ring H, Mumford D, Katona C. Psychiatry in the new undergraduate curriculum. *Adv Psychiatr Treat*. 1999;5:415-419.

13. Rutz W. Preventing suicide and premature death by education and treatment. *J Affect Disord*. 2001;62:123-129.
14. World Psychiatric Association and World Federation for Medical Education. *Core Curriculum in Psychiatry for Medical Students*. New York, NY: World Psychiatric Association & World Federation of Medical Education; 1998.
15. World Psychiatric Association. *Institutional Program on the Core Training Curriculum for Psychiatry*. Yokohama, Japan: World Psychiatric Association; 2002.

Selected references in Spanish (provided by Prof Amelia Musacchio)

1. Musacchio A. La formación del psiquiatra [Psychiatrist training]. In: Marchant N, ed. *Manual del Psiquiatra*. Buenos Aires, Argnetina: Guía; 2005. In press.
2. Musacchio A. Formación psicoterápica del médico [Psychotherapeutic training of the physician]. In: Mesones H, ed. *La Psicoterapia y las Psicoterapias*. Buenos Aires, Argentina: Ananké; 2003.

Linda Gask, Professor of Psychiatry, Division of Primary Care, University of Manchester, Rusholme Health Centre, Walmer Street, Manchester, M14 9NP, UK
E-mail: Linda.Gask@manchester.ac.uk

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Personality of future psychiatrists A need for assessment?

Dusica Lecic Tosevski, George N. Christodoulou, Milica Pejovic-Milovancevic, Lazar Tenjovic, Saveta Draganic-Gajic, Jelena Stepanovic
Section on Preventive Psychiatry, World Psychiatric Association

Introduction

There is conflicting information concerning personalities of psychiatrists and psychiatric trainees. Psychiatrists are often described as "unstable" or "weird," or "confused thinkers" (Christodoulou et al, 1995). However, in studies that attempt to document this, choice of medical specialty is related to personality traits: psychiatrists (especially women) were described as reflective, tender-minded persons with imaginative ideas and interested more in people than things (Frank et al, 2001). They are also described as emotionally stable intellectuals, with personality features desirable for the practice of their profession, such as increased need for change, much adaptability, and a help-giving attitude. It has been shown that psychiatric trainees, contrary to common belief, have stable personalities, perhaps even more stable than medical trainees (Christodoulou et al, 1994, 1995; Lecic-Tosevski et al, 2004).
However, the stress of dealing with individuals who suffer from severe mental disorders may cause a variety of emotional disturbances in psychiatrists, especially depression, but also substance abuse, including alcoholism. Additionally, psychiatrists are somewhat more likely than other specialists to report having had personal or family histories of various psychiatric disorders (Frank et al, 2001). The high suicide rate only makes things worse, in terms of negative attitude towards psychiatrists (Tsuang et al, 1992).

The objective of our study was to investigate personality characteristics of psychiatric trainees. The question we asked was whether the personality of psychiatric trainees differed from the personality of internal medicine trainees. This was a joint study with the Department of Psychiatry, University of Athens.

Methods

Forty psychiatric trainees under training at the Belgrade University Psychiatric Department were consecutively assessed

at the second year of their training during the years 1996 to 2000. There were 28 women and 12 men in the sample ranging from 26 to 42 years (mean age 33.16 years, SD=3.59 years). The control group consisted of 36 internal medicine trainees, 25 women, and 11 men ranging from 28 to 48 years (mean age 35.53, SD=5.15 years). None of the subjects had reported any psychological problem in their life history.

Personality was assessed by Eysenck's Personality Questionnaire (EPQ) (Eysenck et al, 1975) and Millon Multiaxial Clinical Inventory (MCMI) (Millon, 1983). EPQ is a self-report personality inventory consisting of 90 questions to be answered "Yes" or "No" by the respondent and measuring three major dimensions of personality: extraversion, neuroticism, and psychoticism. MCMI is a 175-item, self-administered, true/false instrument that measures 11 *DSM-III* personality disorders, plus 9 clinical syndromes. The MCMI results can be appropriately interpreted as measures of personality dimensions, and not only disorders per se (Divac-Jovanovic et al, 1993).

Informed consent was obtained from all participants, and the information provided was confidential. The participation in this study was voluntary, unrelated to further training career of participants.

The differences between psychiatric trainees and trainees in internal medicine were analyzed by the separate multivariate analyses of variances with the EPQ and MCMI scales as dependent variables. When needed, post-hoc univariate analyses of variances were also used.

Results

Related to age and sex ratio the sample was representative for the total groups of trainees and similar for both groups (gender: Fisher's exact test: two-sided P=0.81; age: Mann-Whitney test: U=590.5, z=1.95, P>0.05). Mean scores on the EPQ are shown in *Table I*.

Multivariate analysis of variance showed that there were differences between psychiatric and medical trainees on the EPQ scales (Wilks lambda = 0.78, $F[4.75]=5.13$, $P<0.01$). Psychiatric trainees had lower

Table I. Means, standard deviations, *F* and *P* values of EPQ scales. *$P<0.001$.

Scale	Psychiatric trainees N=40	Medical trainees N=36	*F*	*P*
EPQ neuroticism	8.20 (4.38)	10.00 (4.97)	2.95	0.090
EPQ extraversion	13.25 (4.05)	13.72 (4.56)	0.24	0.625
EPQ psychoticism	4.48 (2.31)	6.89 (3.33)	14.57*	0.000
EPQL control scale	10.36 (4.08)	11.17 (4.31)	0.73	0.395

mean scores than medical trainees on the psychoticism and neuroticism scales. However, post-hoc univariate analyses of variance showed that the groups were clearly different only with regard to the mean psychoticism scores (*F*[1.78[=14.57, *P*<0.001). The difference on the neuroticism scale was marginally significant.

We compared our results to those obtained by Christodoulou et al (1994) using the same method. The analysis suggested that the psychiatric trainees in our sample were more extraverted and more prone to socially desirable responding (extraversion scale: *F*[1.149]=33.64, *P*<0.001; control scale: *F*[1.149]=136.18, *P*<0.0001). There was no difference with respect to neuroticism or psychoticism scales.

Means, standard deviations and *F* values of MCMI personality dimensions are shown in *Table II*. Multivariate analysis of variance showed that there were differences between the psychiatric trainees and the control group with respect to the mean MCMI scores (Wilks lambda =0.35, *F*[20.42]=3.90, *P*<0.001). Psychiatric trainees had lower mean scores on the following MCMI scales: schizoid, dependent, passive-aggressive and paranoid. Both groups had rather high compulsive scales, reflecting their proneness to perfectionism.

Discussion

Psychiatrists are often experienced by their colleagues and the public as being unorthodox. Together with their patients, they often suffer social stigma-

Table II. Means, standard deviations, and *F* values of MCMI personality dimensions. *P<0.05, ** P<0.01, ***P<0.001.

Personality dimension	Psychiatric trainees N=40	Medical trainees N=36	*F*	*P*
M1 schizoid	38.81 (20.62)	51.41 (26.74)	4.36*	0.041
M2 avoidant	36.07 (18.80)	47.91 (25.77)	3.68	0.060
M3 dependent	37.03 (21.83)	50.59 (26.09)	4.99*	0.029
M4 histrionic	67.26 (18.67)	67.16 (18.50)	0.00	0.983
M5 narcissistic	65.16 (16.52)	71.94 (21.91)	1.91	0.172
M6 antisocial	65.48 (13.39)	71.28 (15.18)	2.57	0.114
M7 compulsive	65.87 (8.08)	62.22 (10.66)	2.33	0.132
M8 passive-aggressive	38.13 (18.47)	52.41 (20.55)	8.39**	0.005
MS schizotypal	45.45 (8.84)	43.47 (19.73)	0.26	0.611
MC borderline	41.32 (13.71)	47.44 (17.41)	2.38	0.127
MP paranoid	52.32 (15.93)	69.69 (9.81)	27.34***	0.000

tization, which may reflect a fear from psychiatrists, a defense against one's own shadow, unconscious conflicts, fear of being "recognized," etc.

There is also a widely held belief among lay people, but also among medical students and doctors, that the choice of psychiatric training is usually determined by an underlying emotional conflict, and that such a choice is made by physicians with so-called "disturbed personality" in order to obtain healing through training. However, choice of psychiatric career is determined by a variety of factors (sociocultural factors, family tradition, practical considerations, influence of key persons, etc), and personality is just one of these factors (Christodoulou et al, 1994).

As a reference group, we chose internal medicine trainees. In one of the studies, compared with the general population, these trainees were shown to have deeper intellectual curiosity, higher aspiration levels, and vivid imagination, to be attentive, more receptive to emotions, interested in mental stimulation, and to think carefully before acting (Hojat et al, 1999). In our study, however, psychiatric trainees had more "stable" personalities than medical trainees, which is in accordance with results obtained in a previous study (Christodoulou et al, 1994, 1995).

The EPQ showed that psychoticism was significantly higher in medical trainees than in psychiatric trainees. According to Eysenck (1976), high scores on the dimension of psychoticism reflect the following traits: impulsiveness, lack of cooperation, oral pessimism, rigidity, low superego control, low social sensitivity and persistence, lack of anxiety, and lack of inferiority feeling.

Findings obtained on EPQ were confirmed on the MCMI, which showed that psychiatric trainees had lower scores than medical trainees on schizoid, dependent, passive-aggressive, and paranoid personality dimensions. Although both groups had normal personality profiles, obtained higher dimensions, especially the paranoid one, might reflect greater vulnerability of medical trainees, at least in the examined sample. Tolerance of uncertainty is believed to be an important attribute of practicing physicians, which is not easy with the high paranoid dimension, reflecting hypersensitivity (Schor et al, 2000).

Both psychiatric and medical trainees had a rather high compulsive dimension, showing their proneness to perfectionism, which is a desirable trait among physicians and scientists. However, severe perfectionism is a personality trait that has been shown to increase the risk of anxiety and depressive disorders. In addition, the "imposter phenomenon" occurs when high-achieving individuals chronically question their abilities and fear that others will discover them to be intellectual frauds. Both of these characteristics seem to be pertinent factors in students of health professions (Henning et al, 1998).

The main limitation of this study is a pos-

sible impact of the future psychiatrists being more familiar with psychology, which could be connected with their tendency to provide socially desirable responses. In addition to that, implications for understanding the role of personality factors in the efficacy of health services are likely to require larger sample sizes and preferably a longitudinal study.

Conclusion

The physician's personality is important in everyday work of psychiatrists and psychotherapists for two reasons. First, for the therapeutic alliance since it has been shown that the therapeutic relationship has central importance in the course and outcome of psychotherapy and treatment of many disorders and that it is the relationship that cures, rather than the technique applied (Storr, 1992). In addition to that, personality plays a decisive role in vulnerability or resilience towards various mental health problems that may be caused by the stress of dealing with mentally disordered people.

We believe that personality assessment of psychiatric trainees before onset of their training would be useful not only for reasons associated with the efficacy of the service, but also for reasons related to the well-being of the trainees themselves. This non-cognitive factor may be used in conjunction with other information to predict cognitive and clinical performance of trainees (Borges, 2001). Further research might contribute to changing the frequent belief that psychiatrists have a "problematic mental structure." While destigmatization is important for psychiatric patients, it is also necessary for the people who care for them.

Abstract

There is conflicting information concerning personality characteristics of psychiatrists and psychiatric trainees, ranging from emotional instability to positive traits such as flexibility and reflectiveness. The aim of this study was to explore personality characteristics of psychiatric trainees and to compare them with those of trainees in internal medicine. The personality of 40 psychiatric trainees and 36 internal medicine trainees were assessed by Eysenck Personality Questionnaire (EPQ) and Millon Clinical Multiaxial Inventory (MCMI). The differences were analyzed by separate multivariate analyses of variances with the EPQ and MCMI scales as dependent variables. Although both groups had normal personality profiles, the EPQ dimension of psychoticism and MCMI schizoid, dependent, passive-aggressive, and paranoid personality dimensions were significantly higher in internal medicine trainees. The obtained higher dimensions of personality traits, especially the paranoid trait, might reflect greater vulnerability and hypersensitivity of examined trainees in internal medicine. Personality assessment of future psychiatrists before onset of training could be useful for reasons associated with the efficacy of the service as well as for reasons related to their well-being.

Bibliography

1. Borges NJ. Personality and medical speciality choice: technique orientation versus people orientation. *J Voc Beh*. 2001;58:22-35.
2. Christodoulou GN, Lykouras LP, Mountokalakis T, Voulgari A, Stefanis CN. Personality of psychiatric versus other medical trainees. *J Nerv Ment Dis*. 1995;83:339-340.
3. Christodoulou GN, Lykouras LP, Mountokalakis T, Voulgari A, Stefanis CN. Personality characteristics of psychiatric trainees. In: Christodoulou GN, Kontaxakis VP, eds. *Topics in Preventive Psychiatry. Bibl Psychiatrica*. Basel, Switzerland: Karger; 1994:137-142.
4. Divac-Jovanovic M, Svrakic D, Lecic-Tosevski D. () Personality disorders: model for conceptual approach and classification. Part I: general model. *Am J Psychother*. 1993;47:558-571.
5. Eysenck HJ, Eysenck SBG. *Manual of the EPQ (Personality Questionnaire)*. London? UK: Hodder & Stoughton Educational. San Diego, Calif: Educational & Industrial Testing Service; 1975.
6. Eysenck HJ, Eysenck SBG. *Psychoticism as a Dimension of Personality*. London, UK: Hodder and Stoughton; 1976.
7. Frank E, Boswell L, Dickstein LJ, Chapman DP. Characteristics of female psychiatrists. *Am J Psychiatry*. 2001;158:205-212.
8. Henning K, Ey S, Shaw D. () Perfectionism, the imposter phenomenon and psychological adjustment in medical, dental, nursing and pharmacy students. *Med Educ*. 1998;32:456-464.
9. Hojat M, Nasca TJ, Magee M, et al. A comparison of the personality profiles of internal medicine residents, physician role models, and the general population. *Acad Med*. 1999;74:1327-1333.
10. Lecic-Tosevski D, Pejovic-Milovancevic M, Tenjovic L, Draganic-Gajic S, Christodoulou G. Personality characteristics of psychiatric trainees. *J Psychother Psychosomat*. 2005;74:129-130.
11. Millon T. *Millon Clinical Multiaxial Inventory Manual* (3rd ed). Minneapolis, Minn: National Computer System; 1983.
12. Schor R, Pilpel D, Benbassat J. Tolerance of uncertainity of medical students and practicing physicians. *Med Care*. 2000;38:272-280.
13. Storr A. The Art of Psychotherapy. UK: Butterworth-Heinemann Ltd; 1992.
14. Tsuang MT, Simpson JC, Fleming JA. Epidemiology of suicide. *Int Rev Psychiatry*. 1992;4:117-122.

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Dusica Lecic-Tosevski, Professor of Psychiatry, Director, Institute of Mental Health, School of Medicine, University of Belgrade, Palmoticeva 37, 11000 Belgrade, Serbia & Montenegro
E-mail: dusica.lecictosevski@eunet.yu

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Recent advances in mental health economics research

Samuel H. Zuvekas, Katarzyna Prot-Klinger
Section on Mental Health Economics, World Psychiatric Association

Mental health economics research encompasses a broad array of topics. Research topics of current interest in the field include: assessing the economic burden of mental disorders; the economic evaluation of mental health treatments through cost-benefit, cost-effectiveness, and cost-utility studies; a new area of economic evaluations specific to psychotropic medications; the financing of mental health services in both the public and private sectors; the special aspects of financing treatment for children and adolescents; and individuals dually diagnosed with both substance and mental disorders. Interest in cross-national comparisons of mental health services and their financing in the various countries of the world is also growing (World Health Organization, 2001).

The WPA Section on Mental Health Economics, established in 1998 and given permanent status approval in 1999, encourages interdisciplinary research between psychiatrists, economists, and other professionals in the mental health sector in order to enable a common language and scientific background between those who finance, provide and use services for mental and addictive disorders throughout the world. The specific goals of the section are to: (1) promote the development of high-quality interdisciplinary research; (2) provide clinicians with scientific information on mental health economics to be used for decision-making and advocating the needs of the mental health sector; and (3) develop communication networks to disseminate scientific research to those who finance, provide, and use services for mental and addictive disorders. Mental health economics research introduces key data to inform decisions about mental health policy and treatment, especially in countries with large bodies of research studies, such as the USA. In particular, this research provides the information needed for clinicians, other mental health professionals, service providers, and policymakers to adequately identify the financial needs of the mental health sector and the treatments that best maximize health benefits. It helps these same decisionmakers develop and reform financing systems to sup-

port comprehensive, community-based treatment, taking into account the complex array of clinical and social services needed for reducing the family and social burden when severe mental disorders are managed in the community.

The Section encourages the growth of mental health economics research by sponsoring regional (eg, Cairo, 2000; Bucharest, 2001) and global research conferences (eg, Chicago, 2000; Venice, 2003, 2005), and the official journal of the Section, *The Journal of Mental Health Policy and Economics*. The journal is the first in medicine focused on the relationships between health policy and economics at the specialty level. To further stimulate research and support excellence in the field, the journal established the *Adam Smith Award in Mental Health Policy and Economics Research* aimed at recognizing the best relevant articles published by J Mental Health Policy Econ. The first prize was awarded in March 2003 (Slade and Salkever, 2001) and the second in March 2005 (Markowitz et al, 2003). The international growth of the field is seen in the presentations of research from about 25 different countries at the March 2005 conference in Venice.

Important recent advances in mental health economics research are summarized by subject area as follows.

Assessing the burden of mental disorders

The World Health Organization's (WHO) Global Burden of Disease project continues to highlight the high economic and societal burden of mental disorders throughout the world. Most recent estimates (World Health Report, 2002) show that mental and addictive disorders account for 13% of the burden of all diseases in terms of mortality and disability. In developed countries, unipolar major depression alone is the second cause of burden of disease in terms of disability-adjusted life-years (DALYs) second only to ischemic heart disease.

Previous cost-of-illness studies found that nontreatment costs are often several times the direct treatment costs of mental disorders. Most of these economic costs result from the reduced or complete inability to work of patients or their relatives. By implication, the economic costs of not financing treatment of mental disorders may be substantial. Mental health economics researchers have made important strides in better quantifying these nontreatment costs through the application of state-of-the art econometric techniques (Slade and Salkever, 2001). Work also continues on better estimating the economic burden to family members in caring for a spouse, parent, or child with a disabling mental disorder. These advances also contribute to improvements in cost-effectiveness evaluations of specific treatments by better capturing all of the economic and societal benefits from improved functioning, and not just improved symptomology.

Cost-benefit, cost-effectiveness, and cost-utility studies

A major goal of mental health economics research is to quantify for clinicians, providers, and policy-makers, which treatments provide the best health outcomes in relationship with their costs. If it is relevant to investigate the possible underfunding of mental health services due to chronic funding problems in government budgets for psychiatric services and to the limited social awareness on the burden of mental disorders, it is equally important to make sure that scarce resources are spent well. Early mental health economics research was instrumental in demonstrating that people with severe psychiatric disorders could effectively and often more cheaply be treated in the community rather than institutions (Weisbrod et al, 1980). Subsequent studies in a number of countries have refined and extended this basic result. There is consensus, 25 years after the Weisbrod et al (1980) study, that in general community care produced "better outcomes, such as quality of life, that it better respects human rights and that it is **more cost-effective** than institutional treatment" (World Health Organization 2001).

Discussion today focuses on what types of community care are most cost-effective, and for which groups, particularly taking into account tailored opportunities in the community for individuals with severe mental disorders (ie, the old institutionalized patients discharged in the community and at risk of becoming homeless and the young new chronic subjects who may be a severe burden in their family environment). Marshall et al (2001) compare three sets of treatments: (1) acute day hospital versus inpatient admission; (2) supported employment versus prevocational training; and (3) day hospital versus outpatient care. They find that acute day hospitals are a cost-effective option in situations where demand for inpatient care is high, but are less attractive when demand for inpatient care is low and effective alternatives already exist. Supported employment was found to be more cost-effective than prevocational training. The Marshall study also found that day treatment programs were superior to continuing outpatient care in terms of improving psychiatric symptoms, but no evidence that they were better or worse than outpatient care on other clinical or social outcomes, or on costs. The evidence base continues to develop, but much further research is needed to develop policies to effectively allocate resources.

Mental health disorders pose substantial challenges for conducting economic evaluations of treatment. Tools for assessing patient preferences for treatments and outcomes that are well-developed for use with other types of medical treatment are problematic with individuals who are often cognitively impaired (for example, persons with schizophrenia or dementia) or whose mental disorders otherwise affect cognitive process (for example, persons with anxiety or mood disorders). Much recent work has focused on refin-

ing standard tools and developing new ones for use with populations with psychiatric disorders (Shumway, 2003).

Economic analysis of pharmaceuticals

The growing importance of pharmacological agents in the treatment of both medical and mental disorders has led to the development of the new specialized field applying economic analyses to pharmaceutical treatment (sometimes referred to as pharmacoeconomics). The especially rapid growth in the use and costs of SSRI and other newer antidepressants and second-generation antipsychotics over the last 15 years has led to a strong focus in the field on psychotropic medications. Many pharmacoeconomic studies take the form of cost-effectiveness and other economic evaluations of specific psychotropic agents as previously discussed, but the field covers many other topics.

Berndt et al (2002a) apply state-of-the art economic methods for measuring productivity to understand the effectiveness of depression treatment and how this has changed over time. While the cost of antidepressants have generally increased over time they find that the incremental total cost of successfully treating a major depressive episode has actually fallen, in the range of 1% to 2% a year. Berndt et al (2002b) examine the diffusion of new antidepressants and find that changes in the perceptions of side-effect profiles of different antidepressants among physicians, along with the greater variety of medications available, are strongly related to the greatly increased use of newer antidepressants. As expected, pharmaceutical company marketing efforts were also strongly related to increased use of newer antidepressants.

Current research focuses on specific mental health treatments, and provides information about which psychotropic medications are cost-effective. For example, Wang et al (2004) apply standard cost-effectiveness tools to examine the question of whether clozapine should be restricted to third-line status. In the USA, clozapine can only be prescribed after two other antipsychotic medications have failed. They find that using clozapine as a first-line agent would lead to gains in both life expectancy and quality-adjusted life expectancy, with a ratio to costs that is well within the range of what is generally considered cost-effective.

Financing mental health services

The financing of mental health treatment remains a critical focus of research because, ultimately, financing determines who gets what treatments and how much. At a macro level, the WHO's Project Atlas (World Health Organization, 2001) carefully documents the share of each country's government resources devoted to the treatment of mental and addictive disorders. This international comparison demonstrates large gaps between the burden imposed by psychiatric disorders and the share of health budgets allocated

to these disorders. Furthermore, Project Atlas documents large disparities both between regions and within regions in the public financing of mental health services. Country-specific studies, such as in the Czech Republic (Dlouhy, 2004), similarly point to large gaps between burden of mental disorders and resources allocated to treat them.

At a more micro level, much current research focuses on evaluating alternative mechanisms to finance treatment. A key research question is what the best way is to pay providers. There is clear evidence that providers respond to financing mechanisms. More recently, research has led to better understanding of how to align payment incentives so that providers are able to provide high-quality, evidence-based treatment, rather than simply focusing on reducing costs. For example, Dickey et al (2003) compared treatment of schizophrenia and found no differences between the managed care plan and the unmanaged fee-for-service plan in adherence to the schizophrenia treatment guidelines in a population of disabled Medicaid beneficiaries. Another key challenge is to develop effective financing mechanisms to better integrate all the services needed in the community by those with chronic and persistent mental disorders such as schizophrenia. Often services such as housing, income support, and supported employment are often fragmented among numerous public (and sometimes private) social agencies. Fragmentation and inflexible financing systems create substantial obstacles to developing patient-oriented and community-based mental care even in countries with a longer history of deinstitutionalization, such as Austria (Zechmeister et al, 2002). These obstacles are frequently seen in many Central and Eastern European countries, for example, as discussed in symposia at Section conferences (Venice, 2003, 2005).

In the USA, research continues to focus on the design of health insurance coverage and implications of patient cost-sharing on access to treatment and the out-of-pocket burden of psychiatric disorders. Previous mental health economics research was instrumental in leading many states in the late 1990s to put in place requirements that mental disorders be covered in the same way as other medical disorders.

Children and adolescents

There is increasing recognition in mental health economics research of the importance of understanding issues specific to children and adolescents. Children and adolescents tend to use mental health services at lower rates than adults, and the overall prevalence of the most severe disorders is much lower (because their onset is often in late adolescence and early adulthood). However, there is growing concern about the long-term consequences of disorders that begin in childhood and adolescence, and are often left untreated. Sen (2004) examines correlates of care seeking for depressed mood and

finds substantial racial/ethnic and gender differences in the propensity to seek help when it is needed.

Substance use and alcohol disorders also often begin in adolescence with long-term consequences both for the individual and for society. In the USA, much recent research has examined the impact of alcohol and drug control policies, as well as taxation (excise taxes for alcohol and tobacco), on reductions or delays in drug and alcohol consumption among adolescents. Markowitz et al (2003) found that alcohol control policies also reduced suicides in adolescent males.

Supporting interdisciplinary research capacity in developed, transition, and developing countries

A key goal of the Section on Mental Health Economics is to support and increase research capacity throughout the World. The regional meetings organized by the section (eg, Cairo, 2000; Bucharest, 2001) not only provided a forum for existing researchers in those regions but enhanced opportunities for training new researchers through educational courses provided by internationally recognized authorities from Western Europe and the USA. These activities emphasized to the Section the importance of (1) supporting education on the interdisciplinary aspects of this field in every country, particularly taking into account clinical behaviors in the development of research; and (2) taking into account the regional and national characteristics that may hinder the development and use of mental health economics research, as well as research careers in this field. Those countries with the best-developed research in the field over the past 25 years (ie, USA, UK, Canada, and the Netherlands) received substantial investments in research by the governments and private institutions. In recent years, pioneering research has been conducted in many Western, Central, and Eastern Europe countries as well as in developing countries. As the research capacity has grown internationally, the number of country-specific studies has also grown providing policymakers with key information within the institutional context of their own countries. This reduces the need to make inferences from studies conducted in the USA or the UK, which might not always be applicable to other countries, especially in transition and developing countries. For example, Romero-González et al (2003) studied the implications of structural reforms to Columbia's health care system. They found that by not incorporating coverage of mental health services in the reforms, access to mental health services declined at the same time that access to general medical services increased substantially.

Supporting psychiatrists' awareness of the financing of mental health services

The Section proposes that specialty clinicians in psychiatry be provided basic

information during their specialty training on the socioeconomic burden of mental and addictive disorders, the cost-effectiveness of interventions, and on the various systems of financing during the last year of training. The aim is to enable them to advocate for the financial needs of the mental health system in their country and to support needed policy reforms.

Core training curriculum for psychiatry

The WPA Section on Mental Health Economics proposes to include "Mental Health Economics" in the WPA Core Training Curriculum for Psychiatry.

Mental health economics provides crucially needed information on the socioeconomic burden of psychiatric disorders, costs, and effectiveness of treatments, and on the benefits of different financing and reimbursement policies in bringing about desired changes in the management of mental and addictive disorders.

Mental health economics is relevant in enabling the future psychiatrist to gain comprehensive knowledge of all facets of mental illness, both for the individual and for society, and to interpret and use mental health economics information provided in scientific literature (ie, cost-of-illness studies, cost/effectiveness of interventions, access to psychiatric services, pharmacoeconomics), handling the tools of health economic/quality of life research used in mental health economics.

The seminar, of a minimum of 6 to 8 hours, to be held during the last year of specialty, should enable the future psychiatrist to receive education on issues including:

- *Socioeconomic burden of mental and addictive disorders on patients, family caregivers, workplace and society.*
- *Impact of clinical, social, and financial interventions, aimed at psychiatric prevention, care and rehabilitation, on health, quality of life and economic well-being of the affected populations and on the society as a whole.*
- *Analysis and costing of psychiatric inpatient and outpatient services, and cost-offset patterns with medical, GPs, social, judiciary and other services used by subjects with mental and addictive disorders.*
- *Consequences of different financing and reimbursement methods on services access, quality of care, health outcomes, families out-of-pocket expenditures, focusing on special and particularly vulnerable populations (ie, severely disabling mental illnesses, comorbidities) needing complex multilevel co-ordination of clinical, social and financial interventions.*
- *Ethics in the financing, provision, access, and use of mental health services. Parity of financing and access with other medical specialties. Analysis of various perspectives and behaviors (patients, families, services' users, clinicians, payers, mental health services and health technology providers, society).*

We propose all the psychiatrists should receive a training seminar on these issues, in order to enable them to approach their career being also aware, as psychiatrists, of the socioeconomic impact of the disorders referring to psychiatry and the socioeconomic impact of the interventions that the specialty is able to provide for the care of mental and addictive disorders.

The seminar, beyond the education of future specialty clinicians, may also be an opportunity for young psychiatrists to consider a research career in "mental health economics," and further enhance the contribute of psychiatrists to this interdisciplinary research area that is increasingly demonstrating its importance in informing the financing of mental and addictive disorders.

Bibliography

1. Berndt ER, Bir A, Busch SH, Frank RG, Normand ST. The medical treatment of depression, 1991-1996: productive inefficiency, expected outcome variations, and price indexes. *J Health Econ*. 2002a;21:373-396.
2. Berndt ER, Bhattacharjya A, Mishol DN, Arcelus A, Lasky T. An analysis of the diffusion of new antidepressants: variety, quality, and marketing efforts. *J Mental Health Policy Econ*. 2002b;5:3-19.
3. Dickey B, Normand SL, Hermann RC, et al. Guideline recommendations for treatment of schizophrenia: the impact of managed care. *Arch Gen Psychiatry*. 2003;60:340-348.
4. Dlouhy M. Mental health care system and mental health expenditures in the Czech Republic. *J Mental Health Policy Econ*. 2004;7:159-165.
5. Markowitz S, Chatterji P, Kaestner R. Estimating the impact of alcohol policies on youth suicides. *J Mental Health Policy Econ*. 2003;6:37-46.
6. Marshall M, Crowther R, Almaraz-Serrano A, et al. Systematic reviews of the effectiveness of day care for people with severe mental disorders: (1) acute day hospital versus admission; (2) vocational rehabilitation; (3) day hospital versus outpatient care. *Health Tech Assess*. 2001;5:1-75.
7. Romero-González M, González G, Rosenheck RA. Mental health service delivery following health system reform in Columbia. *J Mental Health Policy Econ*. 2003;6:189-194.
8. Sen B. Adolescent propensity for depressed mood and help seeking: race and gender differences. *J Mental Health Policy Econ*. 2004;7:133-145.
9. Shumway M. Preference weights for cost-outcome analyses of schizophrenia treatments: comparison of four stakeholder groups. *Schizophr Bull*. 2003;29:257-266.
10. Slade E, Salkever D. Symptom effects on employment in a structural model of mental illness and treatment: an analysis of patients with schizophrenia. *J Mental Health Policy Econ*. 2001;4:25-34.
11. Wang PS, Ganz DA, Benner JS, Glynn RJ, Avorn J. Should clozapine continue to be restricted to third-line status for schizophrenia? A decision-analytic model. *J Mental Health Policy Econ*. 2004;7:77-85.
12. Weisbrod BA, Test MA, Stein L. Alternative to mental hospital treatment. II. Economic benefit-cost analysis. *Arch Gen Psychiatry*. 1980;37:400-405.

13. World Health Organization. *The World Health Report 2001. Mental Health; New Understanding, New Hope*. Geneva, Switzerland: World Health Organization; 2001.
14. World Health Organization. *The World Health Report 2002. Reducing Risks, Promoting Healthy Life*. Geneva, Switzerland: World Health Organization; 2002.
15. Zechmeister I, Oesterle A, Denk P, Katschnig H. Incentives in financing mental health care in Austria. *J Mental Health Policy Econ*. 2002;5:121-129.

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Samuel Zuvekas, Senior Economist, Center for Financing, Access and Cost Trends, US Agency for Healthcare Research and Quality, 540 Gaither Road, Rockville, MD 20850, USA.
E-mail: szuvekas@ahrq.gov

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Public policy and psychiatry: recent advances

Helen Herrman
Section on Public Policy and Psychiatry, World Psychiatric Association

"Public health is the science and art of promoting health, preventing disease (and disability), and prolonging life through the organised efforts of society (WHOQOL Group, 1998)."

The Section aims, according to its terms of reference, "to consider ways in which the profession of psychiatry can contribute to the improvement of public health in all countries through influence on public policies affecting health care, as well as through influence on other sectors such as education, commerce, employment, housing, child and family welfare, and justice."

This chapter will consider the growing integration of mental health with public health, and the implications of this for the profession. Psychiatrists have a direct influence on treatment services and standards of treatment, although often limited by lack of resources. Along with the patients and families they serve, and other mental health and health care professionals, they have much to gain from the growing integration of mental health with health care. They also have an important contribution to make by supporting improvements in mental health through public policies affecting development in other sectors of activity in the community.

A public health view of mental health is emerging more strongly than in the recent past, in many parts of the world. Just as public health is based on the idea that health and disease are multifactorial in origin (Cooper, 1993), so the understanding grows that mental health and mental illness are each the product of many interacting factors for any individual and in any community. Improving mental health consequently depends on a range of actions at several levels in any country.

A number of documents published recently including World Mental Health in 1995 (Desjarlais, 1995), the WHO's World Health Report 2001 (WHO, 2001b), the US Surgeon General's Report in 1999, and the IOM Report in 2001 (IOM, 2001), alongside the well-

known studies on the Global Burden of Disease, set out the basis for understanding that mental health is integral to public health. The links in all parts of the world between mental illness and poverty and social disruption are made clear in these documents and in subsequent publications (Costello et al, 2003; Patel and Kleinman, 2003). It is now widely acknowledged within and outside the profession that, as enshrined in the famous WHO definition of health, mental health and mental illness are inseparable from health and illness in general, and closely related to behavior. It is also acknowledged that in all countries only a minority of people living with treatable mental illnesses obtain access to effective treatments and prevention. This is because the stigma of mental illness discourages people from seeking treatment, and because services are scarce and poorly distributed in many countries.

The WHO Western Pacific Region, for instance, in its Regional Strategy for Mental Health published in 2002 (WHO, 2002) proposes two key strategic directions, which are endorsed by countries in the region. These directions are consistent with the recommendations of the World Health Report 2001, and the approaches endorsed by countries in other regions.

1. *An intersectoral approach to mental health promotion and the prevention and treatment of illness*. Intersectoral approaches to mental health promotion include legislation, policy and workforce training in many aspects of community life. The evidence of the effect on mental health of decisions in these areas needs to be gathered and disseminated. Specific prevention of disorders among groups at high risk (such as alcohol and substance abusers, and new mothers with a history of depression) is often carried out through the primary health care system but it is essential that other parts of the health sector, and nonhealth sectors, be involved. An intersectoral approach must also be reflected in the organization of acceptable, accessible and effective health services for people with mental disorders.

2. *The integration of treatment for mental disorders into general health services and a more informed understanding of mental health in the wider community*. Stigma and discriminatory community attitudes are fundamental obstacles to health service integration. They also stand in the way of providing the support needed by family and patient advocacy and self-help groups. Integrating mental health into health care, particularly primary health care, will need continued management of change over the years ahead while working to overcome these obstacles. Integrating mental health promotion into health promotion will require a shift in thinking and community values.

The development and review of a national policy on mental health is an acknowledged approach to improving mental health that is used by many but

not all countries (WHO, 2001a). A national mental health policy can usefully set three goals, with a view to working toward these through a range of health and public policies:
(i) reducing the human, social, and economic burden produced by mental disorders including substance abuse and dependence; (ii) promoting mental health; and (iii) improving psychosocial aspects of health care.

The health and public policy responses can be broadly divided into five areas, which are now discussed.

Advocacy: information and advice about mental health and mental illnesses, and mobilizing of resources for services and health promotion

Advocacy in countries should be directed on the one hand at increasing awareness of the value of mental health among decision-makers and the general public, and on the other hand to fighting the stigma and discrimination that affect those with mental illnesses and their families (WPA institutional program on stigma). Mental health professionals and services have an important advocacy role in facilitating intersectoral action and working with decision-makers.

Mental health is promoted in two ways: by raising the position of mental health in the scale of values of individuals, families, and societies, so that decisions by government and business improve rather than compromise the population's mental health; and by improving the mental health state of the population by reducing disease through prevention, treatment, and rehabilitation (Sartorius, 1990).

Less than 1% of the health budget is spent on mental and neurological disorders in half of the countries in the world (WHO, 2001a). This does not allow the development of mental health care. In the future, national mental health programs need sufficient resources for essential medicines, and for treatments and support of care (often through links with other government and nongovernment sectors), including psychosocial rehabilitation and employment support.

Support for consumers and families and their inclusion in treatment and policymaking

Family and patient self-help and advocacy associations have an important role in assisting individuals and families, and can help to involve consumers and families in policy-making and service management. These groups need moral support and recognition (by governments and nongovernment organizations such as the World Schizophrenia Fellowship) as well as information, education, and material assistance. The participation of consumers and family carers as participants in policy-making and service management is an important development in the process of ensuring the responsiveness, humanizing and standards of care in services.

Clinical services: service delivery and evaluation

The treatment of mental illness has been alienated historically from the rest of medicine and health care. The WHO in its World Health Report 2001 urges countries to replace asylum-based care with community treatment based on primary health care and general hospitals (WHO, 2001b). Integrated high-quality services will enable the early recognition and treatment of mental health problems and mental disorders, and continuity of care close to home, family and employment for people with persistent disabilities.

Health workers in primary care need support from dedicated mental health services. Close connections to social services, housing, employment and disability support are vital, as well as connections to the wider community, including self-help groups, family and natural support groups, traditional healers and other community agents and leaders, including teachers, police and the religious community. Especially in countries where resources are limited, this integration is an essential element for the development of mental health care, including the treatment and prevention of disorders.

People living with persistent disabilities related to psychotic and other disorders have a particular need for community-based or residential psychosocial rehabilitation, disability and employment support, and support for their families. In addition, there needs to be limited provision of secure hospital accommodation with a rehabilitative environment for a small minority of people with complex and persistent disabilities for whom care and treatment in a less restrictive environment is not appropriate.

In low-income countries, particularly when affected by wars and disasters, there is often a gap in coordination between various government and non-governmental agencies providing services and assistance. The lack of coordination between sectors is also an important reason in developed countries for the widespread failure to provide services and support to the most needy with multiple problems, such as those who are members of disadvantaged and minority groups.

People with mental illness and their families often consult traditional healers and traditional leaders. It is important in any country to develop mutual understanding and a system of referral between traditional and modern medicine.

Reorienting and training relevant personnel in mental health skills

The health workforce in most countries needs support to develop the attitudes, skills, and knowledge needed for modern mental health care. Mental health professionals also need continuing education, support, and supervision, as well as conditions of work that make it possible for

them to be effective. This will contribute to the prevention of professional burnout and their better performance.

Addressing the psychosocial aspects of health care

Health services and educational and research institutions are increasingly aware of the importance of psychosocial and behavioral influences on health. Staff education in health services should reflect this.

The needs of people living with HIV/AIDS and their families, for instance, will be best met when clinicians in general health services consult and liaise with mental health professionals, or are trained in principles of mental health care. Research and evaluation of health service outcomes should consider the measurement of disability and quality of life as well as physical and mental symptoms of disease. In general, mental health programs should facilitate the use of mental health skills and knowledge in general health care, for example to improve communication skills, the relationships between patients, families, and clinicians and the overall levels of satisfaction with care, as well as the adherence of patients to recommended treatments.

Mental health promotion

Mental health is promoted (according to the first meaning) when policy-makers in the education, welfare, housing, employment, and health sectors make decisions resulting in improved social connection; reductions in discrimination on grounds of race, age, gender, or health; and improved economic participation (VicHealth, 1999). The emerging evidence for mental health promotion is described in a recent report from WHO (Herrman, Saxena, & Moodie, 2004). Intersectoral action will improve mental health (according to the second meaning) through public health programs designed to prevent epilepsy and intellectual disability associated with brain damage from trauma, infection, and malnutrition, and through better treatment and rehabilitation services to those with mental illness.

Addressing the needs of vulnerable populations can make a significant contribution to mental health promotion as well as to the prevention of mental illness and suicide. Governments, in consultation with other partners and organizations, can consider investing in programs for selected “at-risk” groups (eg, young people, elderly people, rural populations, indigenous populations, and displaced or immigrant communities). Such groups may often be identified within defined settings (such as schools and workplaces) and sectors (such as transport and environment). Settings approaches to health promotion coordinate activities between several sectors over a sustained period, with a view to achieving results in such areas as improved social connection, and reduced discrimination and violence. Specific examples include: providing support to families to improve nurturing

of children and to reduce the chances of child neglect and abuse; examining the culture of bullying in schools; investigating the use and conditions of labor; and care of older persons.

Policy and legislation

National legislation, policies and plans of action for the promotion of mental health and the prevention and treatment of mental disorders will either have to be developed where none exist or reviewed to ensure that they are consistent with current principles and approaches (WHO, 2003).

In particular, legislation regulating compulsory or voluntary treatment of people with mental disorders is lacking in several countries, and in need of review in many others. The appropriate legal protection for individuals with mental disorders needs to be ensured. Laws that respect the rights of individuals with mental disorders to dignified and effective care, and policies that ensure access to these services, are needed.

The policies and plans related to health care should emphasize the integration of mental health care into mainstream health services, and should consider the links between traditional healers and community leaders and the health system. The financing of mental health care, and the regular monitoring of service standards (along with accreditation of general health services) need to be included in national or regional policies.

Encouraging the development of a research culture and capacity

Improvements in mental health depend, to a large extent, on scientific evidence produced locally. It is important that countries improve their capacity to undertake quantitative and qualitative research and evaluation relevant to service standards and improvement, and to mental health promotion.

Reliable information about mental health and disorders is lacking in many countries, especially low- and middle-income countries. Priority public health–oriented research—for example the collection of basic planning information through targeted mental health surveys—needs support. More needs to be done to assess the costs of mental disorders and to investigate cost-effective approaches to the management of disorders in countries at all levels of income. The development and use of appropriate approaches to evaluating mental health promotion programs and interventions are also needed. Indicators of the social determinants of mental health, quality of life, and disability, as well as measures of illness, need to be adapted to the needs of the Region or developed.

To date, universities, researchers, mental health service providers, and communities interested in mental health determinants and outcomes have had limited interaction with each other. Efforts have to be made to facilitate interaction among these various groups.

Suicide prevention

Suicide prevention is a specific issue that draws on all five of the strategies described in this document. Although suicide prevention is often considered under the heading of service provision, in fact achieving reductions in numbers of suicides in any country will require analysis of the situation and formulation and implementation of a program directed to specific problems. It will involve:

- Improving the treatment of mental disorders
- Introducing and monitoring a broad approach to mental health promotion, including, for instance, attention to employment, social connection, and rapid change in traditional ways of life;
- Population approaches to alcohol and drug abuse, including demand reduction and harm reduction strategies
- Controlling the means of suicide, such as access to agricultural poisons, and control of domestic gas supplies and car exhausts
- The mental health care and protection from self-harm of prisoners.

Conclusion

Psychiatrists and their national associations are in a position to offer vital contributions to public health through action and advocacy. These contributions should not be confused with an unhelpful tendency to "medicalize" problems of which a psychiatrist may have little direct or special knowledge. On the contrary, the psychiatrist has a unique perspective and authority based on understanding the multiple personal and environmental contributions to mental health and illness, at individual and population levels; and the consequences in terms of health, productivity and quality of life.

Bibliography

1. Cooper B. Single spies and battalions: the clinical epidemiology of mental disorders. *Psychol Med.* 1993;23:891-907.
2. Costello EJ, Compton SN, Keeler G, Angold A. Relationships between poverty and psychopathology: a natural experiment. *JAMA*. 2003;290:2023-2029.
3. Desjarlais R, Eisenberg L, Good B, Kleenman A. *World Mental Health: Problems, and Priorities in Low-Income Countries. Summary Report.* New York, NY: Oxford University Press; 1995.
4. Herrman H, Saxena S, Moodie R, eds. *Promoting mental health: Concepts, Emerging Evidence, Practice*. Geneva, Switzerland: World Health Organization; 2004.
5. IOM. *Neurological, Psychiatric, and Developmental Disorders: Meeting the Challenges in the Developing World*. Washington, DC: Institute of Medicine National Academy Press; 2001.
6. Patel V, Kleinman A. Poverty and common mental disorders in developing countries. *Bull World Health Organ*. 2003;81:609-615.

7. Saraceno B. Mental health: scarce resources need new paradigms. *World Psychiatry*. 2004;3: 3-5.
8. Sartorius N. Preface. In: Goldberg D, Tantam D, eds. *The Public Health Impact of Mental Health Disorders*. Toronto, Canada: Hogrefe and Huber; 1990.
9. VicHealth. *Mental Health Promotion Plan Foundation Document 1999-2002.* Carlton South, Victoria, Australia: Victorian Health Promotion Foundation; 1999.
10. WHO. *Atlas: Mental Health Resources in the World*. Geneva, Switzerland: World Health Organization; 2001a.
11. WHO. *The World Health Report 2001. Mental Health: New Understanding, New Hope*. Geneva, Switzerland: World Health Organization; 2001b.
12. WHO. *Regional strategy for mental health*. Manila, Philippines: World Health Organization, Western Pacific Region; 2002.
13. WHO. *Mental Health Policy Plans and Programmes*. Geneva, Switzerland: World Health Organization; 2003.
14. WHOQOL Group. Development of the World Health Organization WHOQOL-BREF quality of life assessment. *Psychol Med*. 1998;28:551-558.

Helen Herrman, Professor & Director of Psychiatry, St Vincent's Mental Health Service and The University of Melbourne, PO Box 2900, Fitzroy VIC 3065, Australia
E-mail: helen.herrman@svhm.org.au

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Occupational mental health
A worldwide challenge!

Lennart Levi
Section of Occupational Psychiatry, World Psychiatric Association

In the Constitution of the World Health Organization (WHO), *health* is defined as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." There is no doubt whatsoever that *working life* and its conditions are powerful determinants of health, for better or for worse. The relationship works both ways. Work affects health. But health more often than not also affects a person's productivity and earning capacity as well as his or her social and family relationships. Needless to say, this holds true for all aspects of health, both physical and *mental*. This is why this theme should be of major concern also to psychiatry (Levi, 2005).

However, before issuing any "call for action," by psychiatrists or others, we need to consider whether there is, indeed, a problem, whether work-related or other; stress and depression are widespread, have serious consequences, are becoming more prevalent and severe—and are accessible to interventions (Levi, 2001). The available evidence indicates that the answer to these questions is: yes. According to the World Health Organization (WHO, 2001a), "mental health problems and stress-related disorders are the biggest overall cause of early death in Europe." But they are not only a matter of premature mortality. According to the same report, mental ill health and disorders are among the major health concerns in Europe today. In particular, depression, suicide, and other stress-related conditions, together with destructive lifestyles and psychosomatic diseases, cause immense suffering to people and their families, as well as placing "a great economic cost on society."

How great is this "economic cost"? According to a report prepared during the Finnish European Union (EU) presidency and quoted by the International Labor Office (ILO, 2000), the cost of mental health problems in the 15 member states of the European Union in the year 2000 was estimated to be on average 3% to 4% of gross domestic product (GDP). If we approximate the percent-

age to, say, 3.5% and use the EU15 GDP (19 301 billion euro in 2003) as a basis for our calculation, the cost would amount to a staggering 325 billion euro.

The root causes

Do we know the root causes of these outcomes, and, if so, are they accessible to change?

According to the WHO (2001a), mental health problems can be caused by a combination of circumstances: biological, social, and psychological factors and stressful events. They are usually associated with difficulties either in our personal lives or in the wider environment in which we live. In its analysis of such circumstances, the British government (1998) calls attention to five different types and exemplifies each of them *(Table I)*. The "fixed" factors in the first column are difficult to adjust, whereas successful interventions are feasible against those listed in the other four columns: social and economic; environmental; lifestyle; and access to services.

The causal significance of the latter four types of factors has been analyzed by Wilkinson and Marmot (1998) and Marmot (2004). The authors conclude that the "solid facts" are that: (a) social and economic circumstances affect people's health strongly throughout life; (b) work-related stress increases the risk of disease as do unemployment and job insecurity; (c) social exclusion creates health risks, while social support promotes health and well-being; and (d) individuals may turn to alcohol, drugs, and tobacco, and suffer as a result of their use, but this process is also influenced by the wider social setting, which is often beyond individual control.

The science-policy implementation gaps

The awareness that it is possible to intervene on the above four types of factors has existed for quite a while, with a very considerable and growing body of circumstantial evidence to support it (cf, Marmot, 2004). In spite of this, there is still a broad science-policy gap, and an

Table I. Factors affecting health (British government, 1998).

Fixed	Social and economic	Environmental	Lifestyle	Access to services
Genes	Poverty	Air quality	Diet	Education
Sex	Employment	Housing	Physical activity	National Health Services
Aging	Social exclusion	Water quality	Smoking	Social services
		Social environment	Alcohol	Transport
			Sexual behavior	Leisure
			Drugs	

even broader one between policy and implementation. This is why there has, so far, been "great cry and little wool." As our Section on Occupational Psychiatry see it, the WPA, its member bodies, and you, the reader, may wish to feel challenged to contribute to correcting this state of affairs.

Widespread exposures, morbidity, and mortality

During the 1990s, the European Foundation for the Improvement of Living and Working Conditions conducted and published three major surveys of working conditions and workers' health in the EU Member States.

According to the most recent one (European Foundation, 2001), more than half of the 160 million workers in EU15 report working at a very high speed (56%) and to tight deadlines (60%). More than one third have no influence on task order; 40% report having monotonous tasks. Such work-related "stressors" are likely to have contributed to the present spectrum of ill health: 15% of the workforce complain of headache, 23% of neck and shoulder pains, 23% of fatigue, 28% of "stress," and 33% of backache; and of many other diseases, even life-threatening ones (Shimomitsu, 2000; Folkow, 2001).

Sustained work-related stress is an important determinant of *depressive disorders*. Such disorders are the fourth leading cause of the global disease burden. They are expected to rank second by 2020, behind ischemic heart disease, but ahead of all other diseases (WHO, 2001b).

It is further likely that sustained work-related stress is an important determinant of the *metabolic syndrome* (Folkow, 2001). This syndrome comprises a combination of: abdominal accumulation of adipose tissue; a decrease in cellular sensitivity to insulin; dyslipidemia (increase in low-density lipoprotein cholesterol and triglycerides and decrease in high-density lipoprotein cholesterol); and hypertension, probably contributing to ischemic heart disease and diabetes type 2 morbidity.

The most important pathogenic pathways from psychosocioeconomic determinants to ill health in Europe usually comprise (Levi, 2001): (a) psychosocioeconomically induced physiological overarousal; (b) psychosocioeconomically induced pathogenic behaviors; (c) pathogenic interpretation of environmental characteristics; (d) pathogenic interpretation of proprioceptive signals; (e) pathogenic "patient's delay"; and (f) psychosocial "avitaminosis"/alienation.

Complementary European initiatives

Over a decade ago, in 1993, the Belgian EU Presidency, the European Commission and the European Foundation (1994) jointly organized a major conference on "Stress at work—a call for action." The conference highlighted the

increasing impact of stress on the quality of working life, employees' health, and company performance. On the basis of these deliberations, the European Commission created an ad-hoc group to the Advisory Committee for Safety, Hygiene and Health on "Stress at work." The ad-hoc group proposed and the Advisory Committee endorsed the preparation of a "Guidance" in this field.

This Guidance (Levi and Levi, 2000) emphasizes that, according to the EU Framework Directive, employers have a "duty to ensure the safety and health of workers in every aspect related to the work." The Directive's principles of prevention include "avoiding risks," "combating the risks at source," and "adapting the work to the individual." In addition, the Directive indicates the employers' duty to develop "a coherent overall prevention policy." The Guidance provides a detailed basis for such endeavors.

On the basis of surveillance of individual workplaces and monitoring at national and regional levels, work-related stress should be prevented or counteracted by job redesign (eg, by empowering the employees and avoiding both overload and underload), by improving social support and by providing reasonable reward for the effort invested by workers, as integral parts of the overall management system. And, of course, by adjusting occupational physical settings to the workers' abilities, needs, and reasonable expectations, in line with the requirements of the EU Framework Directive. Supporting actions include not only research but also adjustments of curricula in business schools, in schools of technology, medicine, and behavioral and social sciences, and in the training and retraining of labor inspectors, occupational health officers, managers, and supervisors, in line with such goals.

This overall approach was further endorsed in the Swedish EU Presidency (2001) conclusions, according to which employment not only involves focusing on *more jobs*, but also on *better* jobs. Increased efforts should be made to promote a good working environment for all, including equal opportunities for the disabled, gender equality, good and flexible work organization permitting better reconciliation of working and personal life, lifelong learning, health and safety at work, employee involvement, and diversity in working life.

An obvious interlocking question is – *how*? The answer to this question is considered (Levi, 2002) in three recent European documents: the European Commission's "Guidance on Work-Related Stress" (Levi and Levi, 2000) mentioned above; the European Standard on Ergonomic Principles Related to Mental Work Load (European Committee for Standardization, 2000); and the European Commission's (2001) Green Paper on "Promoting a European Framework for Corporate Social Responsibility."

The European Framework Agreement

Briefly, then, work-related stress has been identified at international, European and national levels as a concern for both employers and workers. Having identified the need for specific joint action on this issue and anticipating a Commission consultation on stress, the European social partners included this issue in the work program of the social dialogue 2003-2005, and on October 8, 2004 signed a Framework Agreement on Work-Related Stress (ETUC et al, 2004):

- It acknowledges stress as a common concern of European employers, workers and their representatives.
- It includes work-related stress and its causal factors by name among the risks that should be prevented.
- It lays down a general framework for preventing, eliminating and managing stress factors (stressors), with specific reference to work organization, content, and the working environment.
- These factors are detailed through a series of relevant examples (that do not constitute a list which could have given rise to errors and omissions).
- The employers' responsibility is clearly spelled out, while participation and cooperation by workers and their representatives in the practical implementation of measures to reduce stress (ie, tackling stressors) are an essential part of the agreement.
- The agreement is oriented towards action to tackle stress.
- Stress that does not stem from the workplace or working conditions is taken into account—if it creates stress inside the workplace ("imported stress").

Would you like to join?

The WPA Section on Occupational Psychiatry has been active since 1983. Its officers and other members have contributed to many of the developments in this field, as reviewed above.

According to its statutes, the aim of the Section is to "create new, and exchange and apply existing knowledge concerning the influence, for good or bad, of psychosocial as well as physical work conditions and environments on mental and psychosomatic health."

In line with this aim, the Section Committee cordially invites readers of *Advances in Psychiatry* and other colleagues to apply for membership and contribute to future developments in this fascinating and dynamic field. If you are interested, please contact:

Prof Lennart Levi:
lennart.levi@ipm.ki.se or
lennart.levi@eurostress.se

Prof Teruichi Shimomitsu:
tshimo@tokyo-med.ac.jp

Prof Satoru Shima:
JAG02166@nifty.ne.jp

Prof Manuel Freire-Garabal:
fffregar@usc.es

Bibliography

1. British Government. *Our Healthier Nation. A Contract for Health*. Green Paper. London, UK: British Government; 1998.
2. ETUC, UNICE, UEAPME and CEEP. *Framework Agreement on Work-Related Stress.* Brussels, Belgium: ETUC; 2004.
3. European Committee for Standardization. *Ergonomic Principles Related to Mental Work-Load—Part 1: General Terms and Definitions; Part 2: Design Principles*. Brussels, Belgium: European Committee for Standardization; 2000.
4. European Commission. *Promoting a European Framework for Corporate Social Responsibility.* Green Paper. Luxembourg: Office for Official Publications of the European Communities; 2001.
5. European Foundation. *Third European Survey on Working Conditions*. Dublin, Ireland: European Foundation; 2001.
6. European Foundation. *European Conference on Stress at Work—A Call for Action. Proceedings*. Luxembourg: Office for Official Publications of the European Communities; 1994.
7. Folkow B. Mental stress and its importance for cardiovascular disorders; physiological aspects, "from-mice-to-men." *Scand Cardiovasc J*. 2001;35:165-172.
8. International Labor Office. Mental Health in the Workplace. Geneva, Switzerland: International Labor Office; 2000.
9. Levi L. Working life and mental health—a challenge to psychiatry? *World Psychiatry*. 2005. In press.
10. Levi L. The European Commission's Guidance on work-related stress: from words to action. *TUTB Newsletter*. 2002;(19-20):12-17.
11. Levi L. Psycho-socio-economic determinants for stress and depression—a call for action. In: *Coping with Stress and Depression Related Problems in Europe*. Brussels, Belgium: Federal Ministry of Social Affairs, Public Health and the Environment; 2001:17-21.
12. Levi L, Levi I. *Guidance on Work-Related Stress. Spice of Life, or Kiss of Death?* Luxembourg: Office for Official Publications of the European Communities; 2000.
13. Marmot M. Status Syndrome. London, UK: Bloomsbury; 2004.
14. Shimomitsu T, ed. Tokyo Medical University Symposium: Work-Related Stress and Health in Three Post-Industrial Settings—EU, Japan and USA. *J Tokyo Med Univ*. 2000;58:327-478.
15. Swedish EU Presidency. *Conclusions: Modernizing the European Social Model. Improving Quality of Work*. Stockholm, Sweden: Swedish Government; 2001.
16. Wilkinson R, Marmot M. *The Solid Facts*. Copenhagen, Denmark: World Health Organization; 1998.
17. World Health Organization. *Mental Health in Europe*. Copenhagen, Denmark: World Health Organization; 2001a.
18. World Health Organization. *World Health Report 2001.* Geneva, Switzerland: World Health Organization; 2001b.

Lennart Levi, Professor Emeritus of Psychosocial Medicine, Division of Stress Research, Karolinska Institute, PO Box 220, Stockholm SE 17177, Sweden
E-mail: lennart.levi@eurostress.se

Areas of specific interest

Advances in Psychiatry (Editor: G. N. Christodoulou)
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Transcultural psychiatry: perspectives on the cultural variations and the use of the dimension of the supernatural

M. Maldonado, G. Bartocci
Section on Transcultural Psychiatry, World Psychiatric Association

In these last few years, the globalization and creolization of peoples and cultures has created an exceptional puzzle of secular and religious conceptions of the world (Fabrega Jr, 2000). At the end of the last century, the proposition that psychiatry and religion are parallel and complementary frames of reference for understanding and describing human experience and human behavior (Bohenlein, 2000) was set forth. For the last century, psychiatry has maintained an uneasy relationship with religion. However, in the last decades, psychiatrists and patients are rethinking and re-accommodating spirituality in the clinical field. Tseng (2001), in opening his seminal Chapter on *Religion, Psychopathology, and Therapy*, points out that “Religion is one of the ways we understand the world and give meaning to our lives. There are numerous religions in different societies and even within the same society that directly or indirectly shape our lives and influence our thoughts and behaviors. They also impact psychopathology, on the one hand, and influence therapy, on the other. Thus, it is essential for clinicians to understand the nature of religion and how to deal with the important cultural aspects of belief and faith.”

For some time now the Section on Transcultural Psychiatry has been in the forefront trying to grasp the outcomes of the new multireligious groundwork of nations. Consequently, it shifted its interest from simply objectifying and comparing the difference in symptom representation within single ethnic conglomerates to examining the psychiatric and religious epistemology in all existing societies.

Thus, the Section on Transcultural Psychiatry is actively contributing to develop the objectives of the WPA by means of well-targeted actions that operationally translate into:

- Enhancing efforts aimed at providing immigrant populations with culturally

meaningful mental health and psychiatric services.

- Contributing to planning and implementation of Mental Health Services in low and middle income (LAMI) countries capable of providing culturally sensitive and clinically effective care for patients that might embrace views different from Western biomedical paradigms.
- Promoting collaborative research, training, and scientific support to institutions in LAMI countries through targeted projects aimed at establishing area centers skilful in providing appropriate and culturally sensitive treatments.
- Contributing to scientific journals to bridge the research gap between LAMI and wealthy countries, and to enhance the dissemination of mental health research publications and reviews in local and international journals.

With the purpose of developing the above operative topics, many distinguished scholars in Section on Transcultural Psychiatry have contributed to the design of culturally sensitive diagnostic guidelines, such as the *DSM-IV-R* (APA, 2002), which provide diagnostic criteria capable of screening for variables arising from individual religious creeds. The above efforts and research studies revealed the need to place special focus not only on the assessment of beliefs and behaviors connected with the supernatural dimension, but also on the evaluation of the variety of therapeutic procedures associated with religious thinking that are adopted in different cultural contexts.

In this respect, the Congress held in the Monastery of St Catherine, Mount Sinai (Egypt), in October 2003, entitled "Religion, Spirituality and Mental Health" cosponsored by the WPA and the WHO-EMRO, launched an "unprecedented event, as never in the history of the WPA has a meeting been solely devoted to the issue of Religion, Spirituality, and Mental Health" (Okasha, 2003). In his welcome address, the Chairman of the Meeting, Prof Tarek Okasha stated, "Religion has entered the mainstream of psychiatric practice. […] Future clinical researches must conceptually consider religion and spirituality factors, and internationally use measures and research designs that tap into deeper aspects of the faith among patients." In a recent paper, Bartocci (2000) already pointed out that the transcultural approach appears to be the most effective among the many useful ways to conduct diachronic and cross-cultural in-depth studies on the multifaceted history of the influence of supernatural beliefs in mental health.

In fact, among different countries and cultural groups, belief in supernatural beings can be considered both an etiological factor of mental disturbance and a therapeutic resource for relieving suffering. The "robbing of the Ego" by means of "singing" rituals among Australian Aborigines, the experience of divine temptation or infatuation, the "*Ate*" drawn from ancient Greek literature, the state of ecstasy of great mystics, and devotion to the Holy Scriptures compound to form an inherited cultural

conglomerate that is embedded in both secular and spiritual credos that reflect their influence on traditional and modern psychiatry. The typical setting of Aesculapian temples is particularly indicative of the overlap between the fideistic expectations of the patients and a wise use of both dreams and empirical means. This kind of setting, which is more integrative, also characterizes a variety of healing procedures, and could be implemented in the practice of modern psychiatry in our globalized world. Tseng (2001) dedicates no less than six chapters of his book to the analysis of the links between cultural factors and different forms of psychotherapy practiced in different cultural contexts thereby proving that psychotherapy is unfailingly "embedded, influenced, related" to cultural roots that often lie deep in religious creeds.

The need to more thoroughly analyze cultural dimensions, including supernatural beliefs, underlies the research efforts of a multitude of transcultural scholars. As an example, we would like to mention Favazza's book entitled *Psychobible* (2004), an exercise that might appear to be somewhat irreverent to worshipers of the divine, but that is simply the outcome of observations made by whoever is aware of spiritual experiences, visions, states of ecstasy, and possession. Let us give another example. The value and extent of healing and spiritual practices is widespread among lay and clerical groups. In 1978, an article published by the *New York Times* reported that 2500 Catholic and Episcopal churches had regular spiritual healing services. This renewed enthusiasm of the Western world on the supernatural, spirituality, and healing urges for a better understanding of the unwitting partnership between the spiritual and secular credo in psychiatry.

Moreover, the observation of increasingly topical phenomena, ranging from *cybernetic suggestions* to the different ways in which the postmodern world represents the traditional figure of Satan or a new population of "Alters," is making its way into doctors' offices and acquiring increasing popularity: "by the 1980s more than 1000 women in therapy had successfully recalled being abducted, inseminated, and returned to Earth, only to be re-abducted for harvesting of their hybrid offspring" (Littlewood, 2001). What was once the protective idea of the irruption of a miracle in the sphere of the conceivable is no longer attributed to holy figures but to Alters that are difficult to place in modern nosology.

The recent Joint Meeting of the two major associations of transcultural psychiatry, namely the Society for the Study of Psychiatry and Culture and the World Psychiatric Association Transcultural Psychiatry Section, held in Providence in October 2004, featured three Scientific Sessions devoted to the topic of religion and psychiatry and placed special focus on the influence exerted by the three major monotheistic religions (Christian, Jewish, and Muslim) on the practice of psychiatry in different

cultural contexts as well as on individual patients. The aim of the three Providence Sessions was to promote further research on:

- How religious principles have influenced psychiatric theories in different cultural contexts.
- If and how therapeutic parameters promoted in cultural contexts that are deeply embedded in their respective religious backgrounds are compatible with medical paradigms.
- The connections between religious fundamentalism and extreme social phenomena (religious wars, suicide-bombings, etc).
- A transnational project promoting public mental health care services that might be sensitive to religious differences.
- The drafting of guidelines to be applied in psychiatric training that might be sensitive to different cultural and religious beliefs.

The attention given to these topics highlight the need to resume comparative studies on monotheistic religions and non-Western medical traditions. Indeed, our future conferences are likely to focus on the comparative analysis of theories of illness causation, diagnostic and treatment methods used by both Western psychiatrists and traditional healers (Maldonado, 2005). The Transcultural Psychiatry Section symposium entitled "Psychiatrists and Healers: Unwitting Partners—A Challenge for Transcultural Psychiatry in Times of Globalization" to be held in Quito, Ecuador in 2005, would like to study in some depth the following issues:

- Knowledge and clinical skills of traditional healers (Asia, America, Europe, Africa, Oceania).
- Exploring the Bridges between psychiatrists and traditional healers.
- Traditional Healers and the challenges of constructing national mental health programs.
- Western folk healers, western psychospiritual healers, and the alternative medicine movement.
- Issues on efficacy and safety of traditional healers' interventions.

Lastly, transcultural psychiatry is urged to take into consideration the globalization of religions. We refer to the forecasts indicating that the world's economic and demographic axis is shifting towards China and India. Geopolitical factors and new religious inputs (for example, from Taoism and Buddhism) will spur the creation of a new spiritual conglomerate, which is likely to redesign both the current religious scenario and the way we practitioners of transcultural psychiatry act.

Religion and supernatural belief systems persistently and profoundly have influenced and continue to shape Western transcultural psychiatry. With the increasing presence of immigrant patients and the current re-emergence of spirituality in the Western World, transcultural psychiatry practitioners have the imperative to become profi-

cient in delivering services that are sensitive to cultural differences and religious beliefs. The same is true for transcultural scholars and practitioners who work in non-Western societies who need to understand and integrate patients' beliefs in the supernatural.

However, the current perspective must be both political and professional, as it requires the expertise of practitioners in order to optimize both the treatment of immigrants throughout the world and the development of intervention actions in LAMI countries that might compound the breakthroughs of positivistic psychiatry with the beliefs and healing procedures acquired through nurturing.

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Bibliography

1. APA. *Cultural Assessment in Clinical Psychiatry.* Washington, DC: American Psychiatric Press; 2002.
2. Bartocci G. Advances in transcultural psychiatry. In Christodoulou GN, ed. *Advances in Psychiatry.* Athens: Beta Publishers; 2000.
3. Bohenlein J. *Psychiatry and Religion.* Washington, DC: American Psychiatric Press; 2000.
4. Favazza A. *Psychobible.* Virginia: Pitchstone Pub; 2004
5. Fabrega Jr, H. Culture spirituality and psychiatry. WPA Forum. *Curr Opin Psychiatry.* 2000;13:525-543.
6. Littlewood R. *Religion Agency Restitution.* Oxford, UK: Oxford University Press; 2001.
7. Maldonado M. Psychiatrists and Healers: Unwitting Partners—A Challenge for Transcultural Psychiatry in Times of Globalization. WPA-TP Section Symposium May 2005, Quito, Ecuador. http://www.runajambi.net/TPS-Meeting2005/index.html
8. Okasha T. *Welcome Address. Religion, Spirituality and Mental Health.* Cairo, Egypt: Egyptian Psychiatric Association; 2003.
9. Tseng WS. *Handbook of Cultural Psychiatry.* California: Academic Press; 2001.
10. *Umanesimo Mediterraneo.* Rome, Italy: Associazione Internazionale Carità Politica di Diritto Pontificio; 2001.

Goffredo Bartocci, Chair of the Italian Institute of Transcultural Mental Health, 9 via Massaua, Rome 00162, Italy
E-mail: tpsection@quipo.it

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Art and Narcissism

Hans-Otto Thomashoff
Section on Art and Psychiatry, World Psychiatric Association

Art, or results of creative processes in general, may best be understood as a form of communication on different levels. Art as a communicative tool extends the verbal border by often using nonverbal techniques according to which the specific type of art is classified, eg, painting, sculpture, music and so on. It also not only takes place between different individuals, but first of all inside the artist him- or herself. Postmodern research on mechanisms of communication has revealed what Freud already had postulated, that the brain works as a system without a direct contact to the outer world and hence is limited to constructing a picture of the "outside" by relying on the stimuli it gets from the sensory system of the body without objectively perceiving it. Therefore, any construction and with it any perception of the world (which necessarily only can be a construction in itself) is entirely subjective. Objectivity is fiction.

Nevertheless, we all do communicate and at least to some extent seem to understand each other. The explanation for this postmodern dilemma is the existence of structural parallels between all brains, resulting in similar if not close to equal perceptions of equal stimuli. A certain sound arouses the same brain area in two people, though the side effects—the associations to that stimulus—may vary significantly. This inevitably allows the conclusion that the brain indeed does have a characteristic structure, a hypothesis first developed by Freud in 1920 and contrasting early concepts of behavioral sciences defining the brain as black box.

Specificity in the brain is not created through a differentiation in the kind of nerve-cell arousal, but only through the localization of interconnected areas into which a stimulus of a sensory organ is transmitted, and these locations are similar in all human beings. Otherwise communication between people would be impossible. It seems important to stress the fact that those structural parallels not only exist because of the similarities in the genetically, hence biologically, determined brain structure, but also due

to similar experiences in early life of all human beings (for example, prenatal life inside the uterus).

If we construct everything, (we assume from that perspective) we perceive, this certainly also is true for creative processes, including the creation of art. In order to be creative a brain needs the capacity to construct, and it needs material to construct from, which makes any artistic construction essentially a reconstruction of previously stored material. The creative potential of a person depends on his or her ability to reconstruct, to dissolve existing structures, and to rebuild them in a new way.

If any construction of the world depends on a reconstruction formed by (a) the stimulus of the perception itself and (b) by an internalized former experience projected onto that perception, and in this way modifying it subjectively, art as well as any function of the brain depends on the brain's structure, which has built itself up through former experiences within the biologically given framework. Art therefore becomes a clue to the inner structure of the brain, as well as allowing interaction with it, becoming a means of potential transformation, a therapeutic tool.

But what actually is the stored material like, what does the structure of the brain look like?

As already mentioned, there are two major levels of the brain functioning being constantly interactive: (a) the biological basis, derived from the 60 billion brain cells, their constructive structure, and their order; and (b) the connective network between those cells, formed by stored experience through links, of which every cell has up to ten thousand. This enormous network is the reason for the potentially endless possibilities in the variation of stored information

While the first level mostly determines the genetically given psychological features like temper, instincts, and drives (mostly equivalent to the Id of the Freudian structural model), the second level mainly consists of the stored information (mostly equivalent with the Ego and Super-Ego of the Freudian structural model). Both are necessarily and constantly interactive and influence each other.

Psychoanalytical object relations theory has defined a basic unit, out of which the second level, the structural part of the brain, is built. This basic unit consists of a specific internalized relationship-experience. A subjective experience on the basis of the already existing brain structure leads to the formation of a specific dyad, formed by (a) the image of the subject and (b) the image of an object (which can be anything the person interacts with: another person, a thing, a situation, even the person him- or herself) in a specific interaction with each other, accompanied by (c) a characteristic affect to this interaction. Any new experience is perceived through the filter of those dyads already existing. An everyday example may elucidate that: if we meet a person for the first

time, we automatically compare this person more or less subconsciously with other persons we already know (X reminds us of Y), and attribute their characteristics to that new person, unless and until we learn differently and in that way manage to create a new experience.

As described, any communication first of all takes place inside our brain, as a communication between the subject within a certain role and the other as an image of an internalized object. So, any communication in its nature first of all is essentially narcissistic, taking place between ourselves and another person created by us. Just when acted out and carried to the outside, we, as well as the other person, are reshaped by the reaction we get from the outer world through our sensory system (which already pre-reshapes it).

A similar dynamic must be active in the creation of art. Based on biologically determined qualities (eg, the human brain likes symmetry or prefers a mixture of new and known information), art also starts as a narcissistic communication inside the artist, between him- or herself and several images of internalized objects, which he or she potentially addresses with his or her art, including again him- or herself, as a viewer of his or her own art.

Hence, it is not a psychological pathology, leading to artistic creation, but the narcissistic structure of the artist in general. Any brain creates an image of the outer world, as described above, which essentially is fiction, so a difference between "normal perception," which is built by a constructive act, to "pure" fiction of artistic creation is almost untraceable. A brain perceiving the outer world through the means of construction, cannot but produce fiction, but also produce art in its broader sense.

It is likely that comparable psychological activity to art creation takes place during dreaming, as well as to some extent during playing.

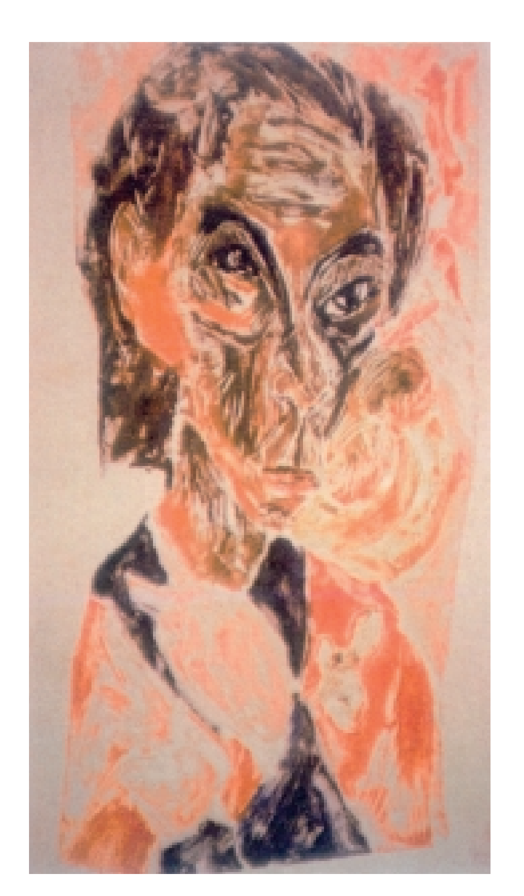
Maybe the real surprise is not that the brain produces art, but on the contrary, that it is to some extent able to construct an image of the outer reality, resembling it closely enough, so that we can reasonably interact with it. From this point of view, it is not a surprise that in psychiatric illness, reality testing is impaired long before the potential for artistic creation, it is likely to be the more complicated function.

The existence of art therefore may be understood as a logical consequence of the brain's construction of the world. It is closely linked to the narcissistic structure of its creator; therefore any possible narcissistic pathology will influence the art, but not cause it. The commonly described manic-depressive element of artistic creation may thus be understood as elevated or depressed levels of narcissism and not as causative agent of the creative process in itself.

Also narcissism, as described before for the psyche in general, is shaped by the biological brain structure as well as by

internalized former relationship experiences, and yet at the same time continuously tends to adjust, if not distort, any new relationship experience in later life on the basis of the already existing structure. Due to these close links, the given brain structures to date are likely reflected in the art of a certain person at a given point in time. In turn, the narcissistic root of art creation helps to explain why art can become a therapeutic tool, a way of understanding and partly readjusting the psychological structure of a person.

To conclude, I want to present a small selection of pictures of an academic artist, who suffered from a narcissistic personality disorder, the most renowned German expressionist painter Ernst Ludwig Kirchner. Certain episodes of his art seem best understandable if linked to the psychological state of the artist at the time of their creation. The following examples may illustrate this representatively:



Picture 1. Self-portrait Head of the Ill (Kopf des Kranken) 1917.



Picture 2. Self-portrait Head of a Man (Männerkopf) 1926.

a) *pictures 1* and *2* show self-portraits of the artist in contrasting levels of narcissistic well-being, paralleling a splitting in the narcissistic self-image related to the splitting mechanism of the psyche in borderline states, swinging between devaluation *(picture 1)* and idealization *(picture 2)*

b) *pictures 3* and *4* show a significant loss of structure. The artist himself described how they were drawn during a psychotic episode, which he experienced while expecting to be called for military duty any time during World War I. To fight his severe anxiety attacks he took morphine and other drugs, began to suffer from delusions, and was finally admitted to various psychiatric hospitals where he stayed for several months.

Again: It is not a possible pathology that makes the artist, but any psychological structure of the brain has an influence on any of its products and thus also on the art it produces.



Picture 3. Self-portrait while drawing (zeichnend) 1916.



Picture 4. Self-portrait during morphine intoxication (im Morphiumrausch) 1917.

Further reading

1. Bodemann-Ritter, C. Gespräche auf der documenta 5, 1972, Frankfurt/M, Berlin, Vienna: Ulstein: 1976.
2. Freud S. *Die Traumdeutung.* (from Gesammelte Werke, Vol. II/III) Vienna, Austria: Deuticke; 1900.
3. Freud S. *Jenseits des Lustprinzips.* (from Gesammelte Werke, Vol. XIII). Vienna, Austria: Internationaler Psychoanalytischer Verlag; 1920.
4. Kernberg O. *Borderline Conditions and Pathological Narcissism.* New York, NY: Jason Aronson; 1975.
5. Kernberg O. *Object Relations Theory and Clinical Psychoanalysis.* New York, NY: Jason Aronson; 1976.
6. Navratil L. manisch-depressiv, *Zur Psychodynamik des Künstlers.* Vienna, Austria: Brandstätter; 1999.
7. Thomashoff HO. *Die Suizidalität in Leben und Werk. Ernst Ludwig Kirchners.* Hamburg, Germany; (Diss.) 1997.
8. Winnicott DW. *Playing and Reality.* London, UK: Tavistock Publications; 1971.

Hans-Otto Thomashoff, Schottengasse 3/23, 1010 Wien, Austria
E-mail: thomashoff@utanet.at

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Progress in five parts: an update on developments in the philosophy of psychiatry

K. W. M. Fulford, Matthew Broom, Giovanni Stanghellini, Tim Thornton
Section on Philosophy and Humanities in Psychiatry, World Psychiatric Association

The last 3 years have seen an expanding pace of development in the new philosophy of psychiatry established in the 1990s (Fulford et al, 2003). The new sections for philosophy in both the World Psychiatric Association and the Association of European Psychiatrists bring the total of new academic and clinical groups concerned with the interdisciplinary field to 33; the support network, the INPP (the International Network for Philosophy and Psychiatry), launched at the meeting of the South African Society of Psychiatrists' meeting in Cape Town in 2002, received full charitable trust status in the UK. Annual international meetings of the INPP have continued, the latest being the meeting of several hundred delegates hosted in 2004 by Christoph Mundt and Thomas Fuchs in Heidelberg. The journal *PPP* (*Philosophy, Psychiatry, and Psychology*) was expanded by 25%; and new book series were established in several parts of the world, including: (1) *International Perspectives in Philosophy and Psychiatry* from Oxford University Press; (2) *Philosophical Psychopathology* from MIT Press; (3) Gerrit Glas' *Psychiatry and Philosophy* series in Dutch from Boom Publishers in Amsterdam; (4) the series from Martin Heinze's group in Germany, the GPWP (Gesellschaft für Philosophie und Wissenschaften der Psyche); and (5) the new journal published by PSN-Edition in Paris, *Psychiatrie, Sciences humaines et Neurosciences* from France.

In addition to the growing academic infrastructure of the subject, perhaps the most important developments have been through the increasing impact of philosophy on practice through a number of initiatives in policy, training, service delivery, and research. In this article, we illustrate the progress being made through these developments in five key areas: (1) concepts of disorder and multidisciplinary models of service delivery; (2) phenomenology and psychopathology; (3) philosophy of science and psychiatric classification and diagnosis; (4) value theory and clinical decision making; and (5) the philosophy of mind, phenomenology, and neuroscience.

Concepts of disorder and multidisciplinary service delivery

Mental health in many parts of the world has been moving steadily towards multidisciplinary and multiagency models of service delivery. Various mental health professionals, in psychiatry, psychology, social work, nursing, and so forth, working increasingly with the voluntary sector, provide a range of different skills to meet the diverse needs of patients, carers, and families, in an increasingly multicultural context. Despite the successes of this approach, however, a key difficulty has been failures of communication and hence of collaborative decision making as the basis of well-coordinated care.
In a study combining philosophical analytic and empirical social science methods at the University of Warwick in the UK, Anthony Colombo and colleagues (Colombo et al, 2003) developed a methodology for exploring and making explicit the different models of disorder that the different disciplines in multidisciplinary teams bring to the clinical encounter. The main finding from the study was that, although everyone involved, including patients and informal carers, claimed to work with a broad biopsychosocial model, their implicit models proved to be very different.

The differences in implicit models are illustrated in *Figure 1*. This compares the findings for psychiatrists and social workers. Thus, psychiatrists showed a pattern of responses that was different in almost every respect from the pattern of responses shown by social workers. Psychiatric nurses (not shown in *Figure 1*) were different again. Patients and carers, importantly, showed a similar range and diversity of models as the professional groups.

By revealing the details of such differences in implicit models, the study has provided the basis for training programs that improve mutual understanding between team members and also allow them to provide care plans for individual clients that are better adapted to their individual needs and expectations.

Linguistic analysis, as the philosophical method underpinning the study, was important in a number of key respects, including: (1) defining the nature of the practical difficulties (as difficulties specifically in the *use* of concepts); (2) suggesting a powerful method for displaying and comparing models (the models-grids, as illustrated in *Figure 1*, correspond to what in philosophical analytic theory is called a "logical geography"); (3) a methodology which is neutral as between patients, carers, and professionals; and (4) a basis (through philosophical value theory, see below) for translating the results of the research into effective training programs (Fulford and Colombo, 2004).

Phenomenology and psychopathology

Phenomenology has, of course, deep roots in psychiatry. The foundational work of Karl Jaspers on psychopathology in the early years of the 20th century, during what has become known as psychiatry's first biological phase, crucially

	MODELS					
ELEMENTS	Medical (Organic)	Social (Stress)	Cognitive behavioural	Psycho-therapeutic	Family (Interaction)	Conspirat-orial
1 Diagnosis/description	P			S		
2 Interpretation of behaviour	P			S		
3 Labels	P			S		
4 Aetiology	P			S		
5 Treatment	P	S			S	
6 Function of the hospital	S P	S P				S P
7 Hospital & Community	P	S		S		
8 Prognosis	P			S		
9 Rights of the patient	S P	S				S
10 Rights of society	S P					
11 Duties of the patient	P		S P			
12 Duties of society	P	S				

Figure 1. Models Grid - Responses of psychiatrists (P) and social workers (S).

influenced the development of modern descriptive psychopathology, and a rich tradition of research in phenomenology and psychopathology has continued in many parts of the world through to the present day (Parnas et al, In press).

Jaspers' psychopathology was a two-stranded psychopathology emphasizing the importance of personal meanings as well as scientific causal explanations in psychiatry. Modern biological psychiatry, including functional neuroimaging methods, although focusing on causal mechanisms, has increased the importance of rigorous work on personal meanings and significance in psychopathology (Andreasen, 2001). Recent examples of the power of phenomenological and related rigorous methods for exploring and working with personal meanings in a practical way in psychiatry include: (1) the Oxford philosopher of mind, Katherine Morris's analysis of different forms of body dysmorphophobia using Sartre's phenomenology of the body (Morris, 2003); (2) the American psychologist and philosopher, Steven Sabat's use of discursive methods as the basis of new approaches to improving meaningful communication with people with Alzheimer's disease (Sabat, 2001); (3) the Dutch philosopher, Guy Widdershoven's use of hermeneutic methods, also with dementia sufferers (Widdershoven and Widdershoven-Heerding, 2003); (4) the Irish philosopher and psychiatrist, Patrick

Bracken's use of Heidegger's phenomenology for the development with Amnesty Inter-national of new approaches to the management of severe trauma (Bracken, 2001); and (5) Giovanni Stanghellini's narrative-based accounts of the experiences of people with schizophrenia (Stanghellini, 2004).

Philosophy of science and psychiatric classification and diagnosis

In the 20th century, the particular difficulties and challenges of psychiatric classification and diagnosis were the basis of much criticism, from both within psychiatry and without, of the scientific basis of psychiatry. These criticisms have been brought very much to the fore by the recent launch of revision processes for both the World Health Organization's *International Classification of Disease* and the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders*.

Work in the philosophy of science, particularly in the final quarter of the 20th century, suggests that these criticisms are fundamentally misplaced. Psychiatric science, recent work in the philosophy of science suggests, is a very difficult rather than deficient science. It is a science, moreover, that in combining conceptual as well as empirical difficulties, is in some respects closer to the model of theoretical physics than to the models of the traditional biological and medical sciences (Fulford et al, In press). Notable among a number of new research initiatives responding to the conceptual challenges of psychiatric classification, are the American psychiatrist and philosopher, John Sadler's wide-ranging and detailed analysis of the ways in which values come into all areas of psychiatric classification and diagnosis (Sadler, 2004), and the American psychiatrist, Juan Mezzich's proposals for ideographic approaches to classification as a potential addition to the growing family of international classifications, reflecting the importance of individual and cultural meanings in a "whole person" approach to psychiatric diagnostic assessment (Mezzich, 2002).

Value theory and clinical decision-making

Psychiatry has always been an area in which, in addition to the empirical challenges of scientific work, we face a range of acute clinical problems arising from diverse and conflicting values. As with the stigmatizing attitudes towards psychiatric science in the 20th century, the value-laden nature of psychiatry compared with other areas of medicine, was the basis of critical attack from many in the so-called antipsychiatry movement. Philosophical value theory, by contrast, a branch of linguistic-analytic philosophy, provides a theoretical framework for embracing the value-laden nature of psychiatry as reflecting its engagement with patients and carers as real people, and thus reflecting the full diversity of human values in the areas with which psychiatry is particularly concerned, ie, such areas as emotion, desire, motivation, sexuality, belief, and perception.

Philosophical value theory has recently been the basis for an approach to clinical decision-making called, by deliberate analogy with evidence-based practice, "values-based practice." Just as evidence-based practice is a response to the growing complexity of the evidence bearing on clinical decisions, so values-based practice is a response to the growing complexity of the values bearing on clinical decisions. At the heart of values-based practice is the development of clinical skills in four key areas: awareness, reasoning skills, knowledge, and communication skills. These skills are the basis of a training manual that has been developed in a partnership between the Sainsbury Centre for Mental Health, an in-service training provider in London, and the Department of Philosophy and Medical School at Warwick University. The manual was launched in the UK by the Minister of State with responsibility for mental health, Rosie Winterton, last year, and is now the basis of a national program of generic skills training for mental health (Woodbridge and Fulford, 2004). As a philosophy-into-practice initiative, values-based practice is also influencing a number of other policy areas in the UK National Health Service, and there are early developments in other parts of the world, including Belgium, Holland, Scandinavia, South Africa, and Spain.

Philosophy of mind, phenomenology, and neuroscience

Although less directly relevant to practice at the present time, developments in the neurosciences have dramatically altered the prospects for new approaches to the management of mental distress and disorder in the 21st century. As noted above, however, it is crucial to these developments that our understanding of brain mechanisms is complemented by equally rigorous methods for understanding and working with individual meanings and significance.

In addition to the developments in phenomenology and practice noted above, there are a number of new research programs in both philosophy of mind and phenomenology directly linked to the neurosciences. A joint program, for example, between philosophers, neuroscientists, and people with personal experience of schizophrenia, funded by the McDonnell-Pew Centre for Cognitive Neuroscience in Oxford, produced a range of new insights into the psychoses published in a special double issue of *PPP* guest edited by the Warwick University-based philosopher of mind, Christoph Hoerl (Hoerl, 2001). A partner volume from the perspective of phenomenology, was published in *PPP* in the same year, guest edited by the American philosopher and psychologist, Louis Sass (Sass, 2001), and there have been a number of other important publications, particularly around philosophical work on the clinical concept of delusion (see, for example, Coltheart and Davies, 2000).

Conclusions

The progress being made in each of the five areas reviewed in this paper illus-

trates the power of approaches to policy, training, clinical work, and research in mental health, which combine on an equal basis rigorous philosophical methods, innovative scientific techniques, and the personal narratives of individual patients, their families and communities.

Bibliography

1. Andreasen NC *Brave New Brain: Conquering Mental Illness in the Era of the Genome*. Oxford, UK: Oxford University Press; 2001.
2. Bracken P. Post modernity and posttraumatic stress disorder. *Soc Sci Med*. 2001;53:733-743.
3. Colombo A, Bendelow G, Fulford KWM, Williams S. Evaluating the influence of implicit models of mental disorder on processes of shared decision making within community-based multi-disciplinary teams. *Soc Sci Med*. 2003;56:1557-1570.
4. Coltheart M, Davies M, eds. *Pathologies of Belief*. Oxford, UK: Blackwell Publishers; 2000.
5. Fulford KWM, Colombo A. Six models of mental disorder: a study combining linguistic-analytic and empirical methods. *Phil Psychiatry Psychol*. 2004;11:129-144.
6. Fulford KWM, Morris KJ, Sadler JZ, Stanghellini G. Past improbable, future possible: the renaissance in philosophy and psychiatry. In: Fulford KWM, Morris KJ, Sadler JZ, Stanghellini G, eds. *Nature and Narrative: an Introduction to the New Philosophy of Psychiatry*. Oxford, UK: Oxford University Press; 2003:1-41.
7. Fulford KWM, Thornton T, Graham G. Natural classifications, realism and psychopathology. In: Fulford KWM, Thornton T, Graham G. *The Oxford Textbook of Philosophy and Psychiatry*. Oxford, UK: Oxford University Press; In press. Chpater 13.
8. Hoerl C. Understanding, explaining, and intersubjectivity in schizophrenia. *Phil Psychiatry Psychol*. 2001;8(suppl):83-88.
9. Mezzich JE. Comprehensive diagnosis: a conceptual basis for future diagnostic systems. *Psychopathology*. 2002;35:162-165.
10. Morris KJ. The phenomenology of body dysmorphic disorder: a Sartrean analysis. In: Fulford KWM, Morris KJ, Sadler JZ, Stanghellini G, eds. *Nature and Narrative: an Introduction to the New Philosophy of Psychiatry*. Oxford, UK: Oxford University Press; 2003:270-274.
11. Parnas J, Sass L, Stanghellini G, Fuchs T. *The Vulnerable Self: the Clinical Phenomenology of the Schizophrenic and Affective Spectrum Disorders*. Oxford, UK: Oxford University Press. In press.
12. Sabat SR. *The Experience of Alzheimer's Disease: Life Through a Tangled Veil*. Oxford, UK: Blackwell Publishers; 2001.
13. Sadler JZ. *Values and Psychiatric Diagnosis*. Oxford, UK: Oxford University Press; 2004.
14. Sass LA. Self and world in schizophrenia: three classic approaches. Phil Psychiatry Psychol. 2001;8:251-270.
15. Stanghellini G. *Deanimated Bodies and Disembodied Spirits. Essays on the Psychopathology of Common Sense*. Oxford, UK: Oxford University Press; 2004
16. Widdershoven G, Widdershoven-Heerding I. Understanding dementia: a hermeneutic perspective. In: Fulford KWM, Morris KJ, Sadler JZ, Stanghellini G, eds. *Nature and Narrative: an Introduction to the New Philosophy of Psychiatry*. Oxford, UK: Oxford University Press; 2003:103-112.
17. Woodbridge K, Fulford KWM. *Whose Values? A Workbook for Values-Based Practice in Mental Health Care*. London, UK: Sainsbury Centre for Mental Health; 2004.

PROGRESS IN FIVE PARTS: AN UPDATE ON DEVELOPMENTS IN THE PHILOSOPHY OF PSYCHIATRY

Bill Fulford, Professor of Philosophy and Mental Health, University of Warwick, Coventry CV4 74L, UK
E-mail: pwwf@norcam.demon.co.uk

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Religion, spirituality, and psychiatry A field wide open for discussion and research*

H. M. van Praag, P. J. Verhagen
Section on Religion, Spirituality and Psychiatry, World Psychiatric Association

Mission

The WPA Section on Religion, Spirituality and Psychiatry has a clear mission, ie:

- to focus attention on religiosity and spirituality as major experiential domains in many individuals;
- to communicate to psychiatrists that the search for meaning in one's life, the need for a transcendental dimension, the urge to reach out to a world beyond the horizon, is a key feature of the human condition;
- to underline that neglect of this terrain in psychiatry implies missing out on diagnostic comprehensiveness and therapeutic opportunities.

Over the past 100 years or so, this terrain has been neglected. Even worse, psychiatrists have tended to qualify religiosity as a neurotic relic of the past; if anything to be treated, not to be cherished.

Professional associations: important statements

Several important statements underscore the professional focus on religion and spirituality. It was the American Psychiatric Association that stated in its Practice Guidelines for the Psychiatric Evaluation of Adults that important cultural and religious influences on the patient's life should be collected as part of the evaluation of the psychiatric patient (APA, 1995).

Before this APA guideline was published in 1995, the American College for Graduate Medical Education, including Residency Training in psychiatry, stated

* Part of this paper is adapted from the Introduction to the book: Glas G, Verhagen PJ, van Praag HM, eds. *Psychological aspects of Biblical Concepts And Personalities*. Dordrecht, Netherlands: Wolters Kluwer. In press.

in 1994 that all training programs should provide its residents with theoretical and empirical knowledge relevant to the role of cultural, religious, and spiritual diversity (Koenig, 1998; Grabovac and Ganesan, 2003).

Even earlier in 1992 the Royal College of Psychiatrists in the United Kingdom had recognized, with the College Trainees Committee, the same need to "emphasize the physical, mental and spiritual aspects of healing in the training of doctors in general and psychiatrists in particular. Religious and spiritual factors influence the experience and presentation of illness." (Sims, 1994).

A major event was the change in diagnostic nomenclature from *DSM-III-R* to *DSM-IV* with the introduction of religious and/or spiritual problem as a diagnostic code for so-called additional conditions that may be a focus of clinical attention. Worth mentioning in this regard is the attention paid to the cultural formulation meant to supplement the multiaxial diagnostic assessment (APA, 1994, 843).

The World Psychiatric Association declared through its president, the Egyptian Okasha, in 1999 that religion has remained an important factor in most patients' lives, no matter where in the world they live.

In 1995, the World Health Organization introduced the so-called WPO Quality of Life Assessment in which six domains of quality of life are stipulated: the physical and psychological domains, level of independence, social relationships, environment, and spiritual, religious, and personal beliefs.

Spirituality and religion

The construct spirituality is poorly delineated and hard to define. It refers to a need for, and fascination with, the metaphysical, the transcendent, the mystical, the mysterious, the occult, to a longing for the lofty, the august, the spiritual, that which exceeds the material aspect of the human life.

Religion is much more structured. It is based on the assumption of, and belief in, the concept of God, in whatever way it is conceived: be it as a concrete anthropomorphic Agency, or as an abstract, nonvisualizable, nonimaginable Power. Whatever the image may be, the underlying notion holds that the divine Principle constitutes a steering, directional force that provides not only direction but also meaning to life. God is for the believer *the* symbol of spirituality in its most perfect form. He has no need for spiritual substitutes. By definition, they would be of a lower order.

Meeting points of psychiatry, religion, and spirituality

Psychiatry, spirituality, and religion are connected on several levels and in various ways. Hereafter some of those meeting points will be discussed.

Mental health

Stress is a popular concept in psychiatry and, one might say, for modern society in general. Many in our societies are supposedly overstressed, and stress is considered to be a causative factor in several major mental disorders (Van Praag et al., 2004). Clearly stress-buffering and stress-intensifying mechanisms should receive due attention, and they do with one notable exception, ie, religion. Can religious beliefs ease mental distress or prevent it altogether, or are belief systems of this nature more a burden, making life dreary and insecure and thus increasing the risk of mental breakdown or worsening its outcome? Studies into these questions are surprisingly scarce, certainly compared with those focusing on other variables such as social circumstances and traumatic life events and their impact on preservation or disruption of mental health.

Several studies do indeed indicate that religiosity may provide a degree of protection against depression and may further remission, in particular in elderly people with few social contacts and little self-confidence (Koenig et al, 2001; Braam et al, 1999, 2000). It appeared to be the plenitude of inner religious life (intrinsic religious orientation) rather than the more formal aspects of religiosity (extrinsic religious orientation) that correlated with the risk of depression and its prognosis.

Much work remains to be done: the concept of stress has to be defined in greater detail; those elements of intrinsic religiosity with protective potential have to be established; better instruments to assess religiosity and spirituality have to be developed; those subtypes of depression particularly influenceable by religiosity have to be determined, and mental disorders other than depression have to be studied as to responsiveness to religious contemplations.

It seems also conceivable that religiosity and spirituality might influence mental health in the reverse direction. Religion may act as a strait jacket, thwarting spiritual growth, inducing fear and emotionally "empty" preoccupation with religious precepts. Instead of lightening and illuminating life, religion then becomes a burden, a source of worry. Religious beliefs may shrink to remorseful waiting until death arrives.

Religious psychopathology

Psychopathological phenomena with a religious charge are by no means rare. Cognitions, perceptions, and corresponding emotions of this kind raise several fundamental questions.

First of all the border issue. Where does normality end and pathology begins (Van Praag, 2005)? What can still to be considered as sound religious experiences and considerations, and what are clearly morbid elaborations? A rather more phenomenological approach can highlight important differences between, for instance, the self-experience of religious or spiritual experiences from that

of psychopathological experiences and symptoms (Sims, 1994; Jackson & Fulford, 1997). If one wants to adhere to the term psychotic, one has to acknowledge that psychosis evidently can produce insights of great philosophical, ethical, and artistic value.

In this context, another question looms. Can thoughts, experiences that by themselves are pathological, be to such a degree coherent and directional that groups of people come to believe in them? The answer is probably in the affirmative. Psychopathological symptoms are not necessarily regressive in that they injure, diminish the richness of a personality. They may be enriching, adding dimensions to a personality that were not detectable before. In psychiatry, one may come across creative maladies. The question arises where to draw a line between fancy and frenzy, between creative novelty and grotesque chimeras.

Another fundamental question is whether the religious themes have played a role in the causation of the disorder. Are they the consequence of the disorder, just "coloring" its presentation, or have they contributed to its occurrence?

A related question is whether the religious reflections are culture- or nature-bound. Is religious psychopathology restricted to patients raised and steeped in a religious milieu or do they also occur in those averse to religion or ignorant of the religion that produced the ideas being more or less caricaturally deformed by the patient? Phrased on a more fundamental level: can illnesses of the mind give rise to novelty, or are morbid contents always derived from memory traces stored in the archives of our brain? Is it possible that under certain conditions themes can be generated that do not rest on previous experiences, of which there is no original in the experiential and cognitive files of that individual?

The questions raised permit no answer and, unfortunately, among psychiatrists the ambition to study them is presently negligible. This is for two reasons. First, psychiatry today wants to be strictly evidence-based, and the only data considered to be "evidence" are those derived from controlled studies of as large groups of patients as possible. The questions raised above do not lend themselves to this type of research. They require detailed case studies, and those lead to individualized probability statements not to more or less definitive, generalizable conclusions.

Second, these issues are theoretically interesting because they further insights into the relations between the phenomenology of mental disorder and the social/religious milieu in which the patient was raised, and his life history. Modern psychiatry, however, does not hold such exercises in high esteem. They have, so it is claimed, no direct practical relevance. This is a questionable view. Detailed knowledge of individual development and the social, religious, and spiritual context are preconditions for psychological interventions to exert lasting beneficial effects.

Psychiatric (psycho)therapy, religion, and spirituality

Religious and spiritual issues have a role to play in (psycho)therapy. The reasoning is as follows. Mental disorders are the product of two complex processes. First of all, a set of *dysfunctions in brain systems* involved in behavioral regulation. They lie at the root of disturbances in particular psychic domains such as that of cognition, perception, emotional regulation, and many others. The brain dysfunctions underlying abnormal behavior and experiences in their turn are caused by a *variety of agents, biological, and psychological in nature*. The former category includes both acquired factors, such as brain injuries induced by trauma or infection, and genetic influences, leading, for instance, to a particular enzyme being in short supply.

Psychological factors, too, can exert a major influence on brain development and brain functioning. Severe psychological traumatization, striking acutely or of a more chronic nature, has measurable and often lasting effects on the brain. Strong evidence suggests that, for instance, adversity during early development may increase the sensitivity for stress and lead to an increased risk of depression and maladaptive behavior (Bremner and Vermetten, 2001; Van Praag et al, 2004). Conversely, stress reduction and strengthening of coping skills may reduce the risk of mental breakdown in trying days, or limit their impact.

Religiosity and spirituality form part of man's psychological fabric. It seems plausible to assume that, if experienced positively, it could promote mental repose and stability, while exerting opposite effects if religious notions are experienced as repressive and frightening. As mentioned, research, though still scarce, seems to confirm this a priori view.

So the psychiatrist (even a secular one) should take a religious history of his or her patients. The spiritual or religious realm of life is foundational. It cannot be moved away with impunity. The psychiatrist should deal with religious subjects. Provided the patient has given evidence of being bothered by them, the psychiatrist has sufficient denominational knowledge, feels at least some affinity to the spiritual needs of his patient, and appreciates his lack of spiritual authority.

Residency training and continuing professional development

Mental health professionals increasingly acknowledge the need for competency regarding religion and spirituality issues in psychiatry. Another two areas of concern will be discussed in this section: psychiatrists' attitudes towards religion and spirituality, and the value of religious assessment.

Attitude

The attitude with regard to religion and spirituality has been labeled as an atti-

tude of neglect (Neeleman & Persaud, 1995), of scepticism and even overt hostility (Sims, 1994). Partly the neglect is related to psychiatry's progress in elucidating the biological and psychosocial causes of mental illness, rendering religious explanations superfluous. In addition, it was until recently often assumed that religious attitudes were linked with phenomena such as dependence and guilt, which were and still are seen as undesirable. Furthermore, it is well known that psychiatrists and psychologists tend to be less religiously orientated than their patients, which may further increase the professional's idea that religious or spiritual beliefs are associated with disturbance. However, it has long been suspected that a positive relation may exist between religion and mental health. Psychology of religion has provided empirical support for that idea. But psychiatry has still to accommodate this evidence into theory and practice (Larson et al., 1993; Neeleman and King, 1993).

Religious assessment

Important cultural, religious, and spiritual influences on the patient's life should be collected as part of the evaluation of the psychiatric patient. A clear understanding of the religious background of the patient gives the clinician an idea of the world the patient inhabits and thus increases the clinician's capacity to empathically understand and work with them sensitively. It gives an answer to questions like: how does the patient interpret what is going on from a larger perspective? In what way do current problems harm or threaten the ultimate in the patient's life, the values that are most cherished? What are his or her sorrows and preoccupations? But also the other way around: what is the impact of religion on the presenting problems and current psychopathology? Is the patient's religious orientation healthy or unhealthy. Taking a religious or spiritual history can help the clinician determine whether the patient's beliefs and community could be used as a resource to help them better cope, heal, and grow. What are these sources, both spiritual and practical, that can be drawn upon in the course of treatment? Does it give clues for the use of religious or spiritual interventions? Or does it mean that the clinician should look for collaboration with a mental health professional trained in religious or spiritual issues, or skilled clergy?

In other words, what skills are needed? The psychiatrist should demonstrate competence in: exploring the patient's beliefs in God or a supernatural being and listening for the role religious/spiritual beliefs play in a patient's life. The psychiatrist should demonstrate competence in inquiring about a patient's use of religious and spiritual practices and the impact of these practices upon patient behaviors, conflicts, and views about mental health beliefs. The psychiatrist should demonstrate competence in interviewing with sensitivity to communication styles, religious language, and nuances of religious/spiritual/cultural meaning. And the psychiatrist should demonstrate competence in eliciting, interpreting, and discussing reli-

gious patients' religious issues and concerns in a nonjudgmental manner.

Goals

The goals that the Section wants to promote are the following:

- Introduction of religious history-taking or spiritual assessment as a routine. In the analysis of psychiatric illness and personality characteristics, religiosity and spirituality should have its legitimate place.
- Focus on residency training and continuing professional development.
- Professional standards require psychiatrists to maintain, develop and remedy any deficits including religion and spirituality in knowledge, skills, and attitude relevant to their professional work.
- Research into the therapeutic significance of religious variables.
- Analyses of the complex construct religiosity/spirituality.
- Development and improvement of assessment methods in research.
- The utility of existing methods has to be studied and where necessary new measuring instruments developed.
- Promotion of effect studies and the role of religious and spiritual variables.

Obviously, the role of religiosity and spirituality in psychiatry is wide open for discussion and research. Our Section hopes to promote just that.

Conclusion

It may have become clear that religion and spirituality are not irrelevant to psychiatry. On various levels these domains interface and overlap. Yet over the past 40 years or so the partners became estranged. This has impoverished psychiatry both in its diagnostic and its therapeutic efforts.

The WPA Section on Religion, Spirituality and Psychiatry wants to bridge this gap and further renewed rapprochement, by furthering and stimulating discussion about this topic and by promoting research.

Psychiatry, religion and spirituality show consanguinity. Neglectfulness of this kinship is detrimental to both parties.

Bibliography

1. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*. Fourth Edition. Washington DC: American Psychiatric Association; 1994.
2. American Psychiatric Association. Practice Guideline for Psychiatric Evaluation of Adults. *Am J Psychiatry Suppl*. 1995;152:64-80.
3. Braam AW, Beekman ATF, Van den Eeden P, Deeg DJH, Knipscheer CPM, Van Tilburg, W. (1999) Religious climate and geographical distribution of depressive symptoms in older Dutch citizens. *J Affect Disord*. 1999;54:149-159.

4. Braam AW, Sonnenberg CM, Beekman, ATF, Deeg DJH, Van Tilburg W. Religious denomination as a symptom-formation factor of depression in older Dutch citizens. *Int J Geriatr Psychiatry*. 2000;15:458-466.
5. Bremner JD, Vermetten E. Stress and development: behavioral and biological consequences. *Dev Psychopathol*. 2001;13:473-489.
6. Grabovac AD, Ganesan S. Spirituality and Religion in Canadian Psychiatric Residency Training. *Can J Psychiatry*. 2003;48:171-175.
7. Jackson M, Fulford KWM. Spiritual Experience and Psychopathology. *Phil Psychiatry Psychol*. 1997;4:41-65.
8. Koenig HG, ed. (1998) *Handbook of Religion and Mental Health*. San Diego, Calif: Academic Press; 1998.
9. Koenig HG, McCullough M, Larson DB. *Handbook of Religion and Health: a Century of Research Reviewed*. New York, NY: Oxford University Press; 2001.
10. Larson DB, Thielman SB, Greenwold MA, et al. Religious Content in the DSM-III-R Glossary of Technical Terms. *Am J Psychiatry*. 1993;150:1884-1885.
11. Neeleman J, King MB. Psychiatrists' Religious attitudes in relation to their clinical practice: a survey of 231 psychiatrists. *Acta Psychiatrica Scandinavica*. 1993;88:420-424.
12. Neeleman J, Persaud R. Why do psychiatrists neglect religion? *Br J Med Psychol*. 1995;68:169-178.
13. Sims A. "Psyche"—spirit as well as mind? *Br J Psychiatry*. 1994;165:441-446.
14. Van Praag HM, De Kloet ER, Van Os J. *Stress, the Brain and Depression*. Cambridge, UK: Cambridge University Press; 2004..
15. Van Praag HM. God's champions and adversaries. About the bordering between normal and abnormal religiosity. 2005. Submitted.

H. M. van Praag, Scientific Advisor to the Department of Psychiatry and Neuropsychology, University hospital Maastricht, and to the Research Institute Brain and Behaviour, Maastricht University, PO Box 616, 6200 MD Maastricht, The Netherlands
E-mail: h.m.van.praag@vanpraag.com

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Ecology, psychiatry and mental health Recent advances

Luigi Janiri, Tiziana Dario, Giovanni Martinotti, and Giuseppe Spinetti
Section on Ecology, Psychiatry and Mental Health, World Psychiatric Association

"Mental Health is an essential and integral part of health as stated in the constitution of the World Health Organization. Just as health is not merely the absence of disease, mental health is also not simply the absence of mental disorder or illness but represents a positive state of mental well-being. Mental Health can be defined as total balance of the individual personality considered from the biological and psychosocial points of view. Mental disorders are illnesses characterized by abnormalities in emotional, cognitive, or behavioral spheres. It is unfortunate that in its current usage the term 'mental health' is identified with mental disorders only. Prevention, treatment, and rehabilitation of mental disorders are, however, part of the broader field of mental health. Alcohol and tobacco abuse and drug-related problems are becoming major public health concerns for most countries in the African region. Improvement of the quality of life of the general public through the prevention and control of mental, neurological and psychosocial disorders and the promotion of healthy behaviors and lifestyles and mental well-being are the goals of national programs for mental health and the prevention of substance abuse."

The above paragraph is what the World Health Organization (WHO) states in its African Regional Strategy for Mental Health in the year 2000 (WHO, 2001).

During the last 100 years there have been major changes in the mental health field. Two of these changes are represented by the shift from institutional care to community care and the focus from mental illness to mental health.

Considering that one of the fundamental questions about the future of psychiatry pertains to the preventive approach at the behavioral level rather than the fight against symptoms, it is important to underline how one of the consequences of the above changes in the mental health field is the acknowledgement of the role of the physical environment beyond the intrapsychic and interpersonal contexts (Kipman et al, 2000).

In line with such an evolution, several psychiatrists recently showed a great interest in ecology.

Thus, an ecopsychiatric approach has been developing, notably in two directions:

- The approach of the "environment," considered as the physical world surrounding the individual human being.
- The approach of the "relationship circle" or "entourage," considered as the human (social and relational) world surrounding the human subject (Kipman et al, 2000; Kipman 2001).

The former regards the internal representation or representativity of the perceived physical objects within an intrapsychic framework. The latter is based upon a more social and interactional account of a human subject considered from the point of view of his needs of connection, support, and care. As examples, natural tragedies and disasters (such as earthquakes and wars) can be regarded as aspects of the approach of the "nvironment," while everyday life shows many aspects of the approach of the "relationship circle."

These two possible approaches should be separated and the importance of the relationship between mental health and environment should be stressed, thus emphasizing the approach of the "relationship circle" and the aspect of everyday life (Kipman, 2001). This approach is the support of all prevention measures, together with both political and individual behaviors, and must be taken into account from an individual as well as a collective perspective. Spinetti and Kipman propose the utility of the "entourage approach" in practicing mental health: this offers the possibility of understanding the kind of interrelations, and the kind of proximity we can find and reach in the workplace (Spinetti and Kipman, 2004).

The workplace "entourage" has several roles to play in:

- Preventing psychiatric disorders. This is a question of primary prevention and is another way toward, and a more positive approach to, the preservation of mental health. This compares with the simplistic consideration of working colleagues only as risk variables and/or as psychogenetic traumatic or stressful factors (for instance, through the fashion of moral harassment or mobbing) rather than possible resources.
- Screening mental diseases, because subjects are under the eye of others all day long.
- Moving the patient to require a specialist (psychiatric or psychological) counseling.
- Helping patients to cope with the treatment.
- Relieving the family of discomfort.
- Facilitating the patient's rehabilitation and readaptation (Spinetti and Kipman, 2004).

In fact, the authors summarize that the workplace "entourage" has a major role in prevention. All the above points can be relevant not only for professional

purposes: even the social, political, and cultural attitudes of the members of the group are fundamentals. The weight of "entourage" has to be considered also on an individual level (treatment) and a collective level (public health). This second level needs information and sensitization of the entourage. In time, it will lead to the integration of the workplace entourage inside the care net. Of course, we should not ignore friends, neighborhood, and cultural and religious groups, which are, in general, all groups in which the individual can find or refind a feeling of belonging or membership.

Spinetti and Kipman propose "ecology in the workplace" as one example of the lines of research possible in the area of the relationships among ecology, psychiatry, and mental health; however, most reflection and studies in this area deal with traumatic, catastrophic, or stressful events.

Stressful life events and psychiatry

Stress research has been a major area of psychiatric investigation since the second half of the last century. Past research into life-event stress and psychiatric illness has tended to explore simple associations between either extraordinary stressors and particular psychiatric disorders, or between the recent accumulation of everyday stressors and mental illness in general. More recent research has assessed more complex associations between stress, other social variables, and psychopathology. Stressors have been examined in relation to a range of other variables, including possible genetic vulnerability, personality predisposition, and comorbidity between disorders. Given the multivariate interactions linking stressful life events and mental illness, shaping theoretical concepts and clarifying methodological issues is necessary to move from anecdotal evidence into scientific models (Pozzi et al, 2004).

But what do we mean with the term "life event"?

A life event may be defined as an occurrence that is possible to identify objectively, that is limited in time, and that modifies in a variable but essential way the life of a person, who then needs to make an effort to readapt to the new situation. Life events may be also specified as adverse, traumatic, and stressful, as well as positive. An "adverse event" is an event that may produce adverse consequences for someone. A "traumatic event" is an event that brings injurious psychical or physical consequences, whereas a "stressful event" is an event that produces a stress reaction (Taylor, 1991; Biondi, 1999).

According to the intensity of events, we should distinguish between "ordinary" (but significant for the subject) and "extreme" (and threatening the physical integrity) since different reactions may follow. According to the *DSM-IV-TR* classification, ordinary events may lead to an adjustment disorder in previously healthy subjects or influence the course

or the relapse of preexisting mental disorders, whilst extreme events may induce an acute stress disorder or a posttraumatic stress disorder (APA, 2000).

According to a developmental psychopathology approach, early occurring stressors may alter the threshold of stress needed to precipitate psychiatric illness in susceptible individuals. Stress may change psychopathological diathesis by creating biological and cognitive modifications and by activating stress-sensitization effects; moreover, stress is known to increase psychopathological liability through effects on brain plasticity (Hammen et al, 2000; Pine et al, 2002).

When a healthy subject is exposed to undesirable events or difficulties, a complex series of psychological functions may be brought into play in order to effect an adaptive response, involving the activation of both the sensitive and the performing mind. Four interconnected steps are hypothesized:
- Processing the immediate emotion response.
- Evaluating the salience of the experience through appraisal and matching with recalled past experiences.
- Organizing a mental strategy for responding via decision-making and behavioral inhibition.
- Synchronizing the operation of the aforesaid mental functions to reduce the risk of negative effects on the self.

In contrast, psychiatric risk following exposure to undesirable events and difficulties could be related to one or more inadequate "cognitive endophenotypes" of the individual (Pozzi et al, 2004).

In addition to an attempt to propose a definition of a life event, notably from a phenomenological point of view, Janiri and colleagues have analyzed some developments of the contemporary psychoanalysis, particularly with the role of "real" trauma in psychopathology (Janiri et al, 2004).

Environment is the complex of elements able to affect the individual's life and constituting both the external and internal reality in which a given event occurs. When the relationship between man and environment is taken into account, the concepts of transformation and adaptation are involved as the opposite human attitudes depending on the prevalence of either of them. In this perspective, ecology can be viewed as a mind's ecology or a physical environmental science. According to the context of reference, events may range from psychic to material and from everyday to occasional to extreme (eg, disasters).

The field of definition of events themselves is broad enough to include not systematic and repeatable occurrences like accidents and facts subjected to some degree of provision like life events (Galimberti, 1999). Life events are datable occurrences involving changes in the external social environment; by definition internal occurrences (eg, changes in perceptions or satisfactions) are not

included (Paykel, 1997). A life event is an occurrence which is possible to identify objectively, limited in time, and that modifies in a variable but essential way the life of a person, so requiring an effort for readapting to the new situation (Pozzi et al, 2004). When readaptation implies the general reaction known as stress, a stressful event is defined as an event that produces such a reaction.

Disasters are events that create confusion and challenge the ordinary structures within a society to succeed in managing the basic needs of that social group (McFarlane, 2002). They are defined according to not only material, but also psychosocial criteria. A disaster is a sudden negative event that brings unhappiness, causes many victims and destructions in the human landscape, overwhelms the normal rescue possibilities, and strikes the society's functions. Thus, in a disaster, each victim, witness or rescuer, is wounded not only in his personal ego, but also in his collective or communal ego.

Psychoanalysis is a powerful key-reading of trauma, by transposing its three meanings (violent shock, tearing, and diffuse consequences) from the biological level to the psychic one. Besides it supplies us with many elements for describing and interpreting trauma: (1) the compulsion to repeat traumatic situations; (2) the deferred action of *Nachträglichkeit* and the temporal question; (3) the disavowal of reality as a defense mechanism against the traumatizing perception; (4) the consequent amnestic and ecmnestic experiences; and (5) the splitting and dissociation of the traumatic contents with respect to ego (Janiri et al, 2004).

The common ground of the traumatic conditions is the clearly perceived short-term danger for the individual's life or that of the persons close to him (Barrois, 1994). Equivalents of the risk of death are severe wounds, tortures, and rapes. In all these cases, the attack to the vital bonds occurs under the sign of Thanatos (Freud, 1989), which represents also loss of symbolization and pure anguish (sensation of being in a blind alley). However, the catastrophic change that massive traumas promote may induce adaptive consequences: trauma can be described as an organizing element of the psychic economy, which imposes a work of mental building and symbolization, such as that occurring in the process of *Nachträglichkeit*. In some way, the idea of anxiety, strictly related to that of trauma, witnesses the contemporary presence of "destruens" (primary anxiety) and "construens" (signal anxiety) functions of the traumatic event on the individual inner world. The same birth-related trauma, with its primary anguish, seems the disorganizing element above all, but its essential role is to stimulate adjustment, to organize defensive/functioning mechanisms, to integrate a presence. Under this point of view, we could define trauma as an event drenched with Eros!

Following such a dichotomous line, the concept if life events, as opposed to death events, sheds some new light on

the aforementioned life (stressful) events, which can be considered as deeply vital phenomena pertaining to existence as a whole and expected along its natural course: hence the importance of the subject's history, personality, and sociocultural context (Janiri et al, 2004).

Torture-related psychopathology

Western psychopathology deals with the notion of trauma reducing it to a condition of disease, of intrapsychic grief, without considering the importance of the "infraction": for theorizing about the disorders caused by torture it usually suggests the concepts of "psychotrauma" and "posttraumatic stress disorder." Who committed the "infraction" (the torturer) is usually not considered except in the victim's nightmares: the consequences of the shocking event (apathy, anxiety, nightmares, etc) have a higher weight than the process and the dynamic that is displayed under it. On the contrary, as sustained by Sironi (2001), trauma caused by torture should be considered as atypical when it is inserted into a usual nosographical category. The western psychopathological notions, however, are too strictly connected to a linear and not cyclic idea of the psychic disorder. Trauma is not a model but a modified state of conscience, mainly transitory. Trauma is a condition linked to the idea of transformation (the torturer is reified, dehumanized, made inanimate) where the psychic grief of the torture cannot be traced back to an individual and intrapsychic conflict. Patients coming from different environments usually feel the same sorrow experiencing the "infraction" but the way trauma is thought determines the different symptoms they can report: when they undergo a psychic breaking they fall ill in a "culturally corresponding" manner. Trauma linked to torture is the realization of the terror: it is the infraction of the other that invades, modifies and influences us. Because of the psychic breaking, what a subject can feel, perceive and think is connected to the way the other has thought about him: this can reappear, reflected, as a feeling of self-belittlement, fear of speaking, asking questions, upsetting, and disappointing. Consequently, facing this kind of situations, it is not possible to deal with the victim on its own but it is essential to consider the effects of the influence and to identify the theory of the torturer, which determines the point of view of the tortured (Dilillo et al, 2004).

In their paper on the Forum about "Ecology, psychiatry and mental health" published on The Italian *Journal of Psychiatry and Behavioural Sciences*, Dilillo et al (2004) describe two different surveys carried out since 1999 in the project "*Psichiatria alla frontiera*" of the Italian Psychiatric Association (Apoulia and Basilicata), with the purpose of monitoring the phenomenon of the psychosocial emergency in the population of refugees. The authors state that it has been possible to determine and classify a group of symptoms mainly mentioned by patients traumatized by tortures to describe their feelings of grief and afflic-

tion. These symptoms can be classified according to two variables: (1) symptoms characterized by emotional block, refuse, silence, apathy, and connected with the part of the victim which is still under influence; and (2) symptoms that produce noise (exteriorization), connected with the part of the victim which fights against the influenced one, loudly and actively. Another classification can distinguish: (1) symptoms concerning the infraction; (2) symptoms determined by the presence of the torturer internalized; and (3) symptoms connected with the access of the hidden knowledge.

The treatment of the victims of torture needs a specific approach, as shown by the few papers in medicine, psychology, and psychoanalysis that are possible to find: in order to guarantee a transcultural approach to the psychopathology of torture, it is important to recognize the limits of the "medical" eye, evaluating with a critical analysis the western psychiatric and psychotherapeutic model. It is essential to propose an ecological approach to the concept of health and illness which contextualizes the part in the whole, the contingent in the history of these people, the medical approach in the culture: this means to put back the malaise (defined by the Kurdish as *sikerti*) in a specific mental space, determined by interactive processes, communicative in the community way. This requires an incessant work with the cultural mediators in order to learn to decode words, meanings, cultural and political contexts where the torture has been committed: as proposed by Bateson (1976) this means "*to orient oneself towards the social roots of the society*." It is not possible to understand the impact of a trauma without catching the meaning of the words in the vocabulary of culture of the person victim of the torture. The process and the dynamic of the trauma are crucial rather than focusing the interest on the consequences of the trauma (symptoms such as nightmares, apathy, etc). It is fundamental to make a specific and systematic enquiry on the medical knowledge and the therapeutic techniques of other populations with a new beginning of a dialogue between the western culture and other approaches with the purpose of achieving a negotiation among different paradigms about crucial aspects as health, illness, and cure.

As postulated by Sironi (2001) it is necessary to refer to theoretical and methodological corpus elaborated by the ethnopsychiatry with the aim to understand the nature of a trauma (intentional trauma) and to implement a successful treatment for the victims of torture. In ethnopsychiatry, the subject is never secluded or considered separately from his familiar history, village, or group of belonging.

In order to study the disorders of a victim, it is fundamental to evaluate the action and the theories of the other subjects implicated in the event (mainly the action of the therapist, in our specific case that of the torturer) and not the supposed nature of the tortured.

In conclusion, it appears basic that the role of the psychiatrist and the sociomedical worker as a "boundary worker" should be regained. This process must involve both the relation between the migrant and the worker than between worker and worker, because the boundary is the place where the identities meet, collide, compare, and reveal each other until becoming confused. Communicating at the frontier means to accept the anxiety to face the other, to discuss together not as rival, to free the lines of the frontier, to leave the chains of the inflexible and firm identity in order to look for a point of contact (Dilillo et al, 2004).

Ecological psychiatry

Ecological psychiatry is a field of psychiatry that deals with the multidisciplined investigation of the mental health of people living or working in unusual environmental conditions. The main issues of ecological psychiatry are as follows:

- The mental health of those who are exposed to harmful effects of specific environmental conditions at work, such as physical, chemical, radiation contamination, and climate extremes.
- The mental health of those whose professional activities affect human psychophysiology.
- Epidemiological studies of the population's health disturbances rate and its alterations in big industrial cities including new industrial settings.
- Multidisciplined investigation of immediate and delayed consequences of ecological disasters: both natural and technological (Krasnov, 2004).

In his paper published on the Forum "Ecology, psychiatry, and mental health," Krasnov takes into account the effects of delayed medical and psychological consequences of the Chernobyl disaster and the mental health of the population living in the affected territories, dividing them into five groups (Krasnov, 2004).

A large amount of the population, a few million living in the polluted area, is totally dependent on government social aid. Being unable to find work in their area, these people feel hopelessness along with inability to feel responsible for their life and for their family. Long-lasting feelings of despair produce specific life attitudes in the population of these areas, which can be considered as psychological isolation from the rest of the country. A few years after the disaster, official documents and mass media placed much emphasis on "radiophobia" developing in the population living at the polluted territories. A wide variety of health disorders has been observed in these persons: cardiovascular, gastrointestinal, and endocrinological diseases are common. Among mental health disorders the prevalence of neurotic-like disorders has been observed. In addition, a high level of alcohol consumption in these territories has been registered.

Mental health disorders in children living in the polluted areas are predomi-

nately as follows: various neurotic disturbances, deviant behavior, and a wide variety of learning disabilities. Physical defects and mental retardation are also frequent in this group.

Moreover, in the population of the high nuclear radiation danger zone evacuated to other places, who lost jobs and social connections and who were forced to change lifestyle and profession, mental disorders are represented by mostly neurotic, neurotic-like, and psychosomatic disorders.

A few years after their work in the zone, a number of persistent mental disorders developed in the "rescue workers," such as neurotic-like and depressive disorders combined with psychosomatic diseases, early hypertension, and atherosclerosis. Cognitive impairments as well as selective cognitive deficiency, memory, and attention disturbances are also common in this group of people. Extreme psychological stress combined with environmental pollution, sleep irregularities during shift work, and other factors have produced a specific mental and psychosomatic syndrome in the "rescue workers." It can be described as a combination of asthenic, somatoform, affective disturbances, impaired attention and memory, selective intellectual deficit with a tendency to psychoorganic syndrome development along with neuroendocrine, immune, and autonomic nervous system dysfunction, psychosomatic, vascular diseases, and neurological changes in various forms of encephalopathy.

Thus, Krasnov defines the syndrome developing in the Chernobyl victims as polymorphous disorders of multiple etiologies and complicated pathogenesis. The complex structure of the disorders developing in the rescue workers, its multiple etiologies, and specific pathogenesis, require specific therapy approaches (Krasnov, 2004).

Ecology and psychiatry in Africa

In his reflection on the Forum about "Ecology, psychiatry and mental health," Okasha focuses on the lacking attention addressed to mental health policies, programs and action plans in most African countries, characterized by low incomes high prevalence of communicable diseases and malnutrition, low life expectancy, and poorly staffed services (Okasha, 2004).

In its analysis of the situation in Africa, the WHO strategy recognizes that populations in the African region are beset by numerous mental and neurological disorders that are a major cause of disability. Furthermore, there is lack of reliable information system in most countries. However, some primary observation and estimates could be made: in addition to the disability caused by mental and neurological disorders, the problem is made worse by the social handicap brought about by the stigma attached to them. Inadequate care at childbirth, malnutrition, malaria, and parasitic diseases may be the cause of the high rate of epilepsy, still highly stigmatizing. Many children suffer from

poor psychosocial development because of neglect by their mothers and other caretakers, and this can lead to poor emotional and cognitive development of the child in later life. Many countries in Africa are engulfed in conflicts and civil strife with the attendant adverse impact in the mental health and well being of the affected population, foremost post-traumatic stress disorders. Besides HIV-related problems, also alcohol-, tobacco-, and drug-related disorders are becoming an increasing concern in the region, adding to the indigenous problems associated with cannabis consumption.

The ultimate goal of the World Psychiatric Association program for promoting mental health services in sub-Saharan Africa and Central Asia is to achieve progress in the adoption of healthy lifestyles and an improvement in the quality of life of people living in those regions (Okasha 2004).

The objectives of the program are to strengthen mental health policies and adopting and implementing regional strategy to prompt mental health and prevent mental, neurological and psychosocial disorders and drug abuse-related problems; reduce disability associated with neurological, mental, and psychological disorders through community-based rehabilitation and to reduce the use of psychoactive substances. On a public level the objective of the program is to change people's negative perceptions of mental and neurological disorders, formulate or review existing legislation in support of mental health and the prevention of substance abuse and to provide equitable access to cost-effective mental, neurological, and psychosocial care (Okasha, 2000).

The fact that mental disorders are among the top 10 causes of disability in Africa and the rest of the world, and that their contribution to the overall burden of disease is going to rise makes a strong case for giving them the attention and resources they need. So, along with reflections dealing with traumatic, catastrophic, and stressful events, research is expected not only in the disorder prevention field, but also in the detection and amelioration of the indices of quality of life, in a transnational and transcultural perspective (Spinetti and Kipman, 2004).

Bibliography

1. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders, 4th Edition, Text Revision*. Washington, DC: American Psychiatric Press; 2000.
2. Barrois C. Le traumatisme. In: Widlöcher D, ed. *Traité de Psychopathologie*. Paris: Presses Universitaires de France; 1994;729-752.
3. Bateson G, Ruesch J. *La matrice sociale della psichiatria*. Bologna, Italy: Il Mulino; 1976.

4. Biondi M. Disturbi dell'adattamento, disturbo acuto da stress e disturbo post-traumatico da stress. In: Cassano GB et al, ed. *Trattato Italiano di Psichiatria*. 2nd edition. Milan, Italy: Masson; 1999:2291-2300.
5. Dilillo A. Labellarte G, Martinotti G, Nardini M. Torture-related psychopathology. *Ital J Psychiatry Behav Sci*. 2004;14:25-28.
6. Freud S. *Al di là del principio di piacere. OSF, 9 (1920).* Turin, Italy: Bollati Boringhieri; 1989.
7. Galimberti U. *Dizionario di psicologia*. Turin, Italy: Garzanti; 1999.
8. Hammen C, Henry R, Daley SE. Depression and sensitization to stressors among young women as a function of childhood adversity. *J Consult Clin Psychol*. 2000;68:782-787.
9. Janiri L, Calvosa F, Dario T, Buonanno A, De Risio S. Considerations about the traumatic role of environment on mental health. *Ital J Psychiatry Behav Sci*. 2004;14:20-24.
10. Kipman SD. Possible relationship between mental health and environment including in work-place. In: Spinetti G, Janiri L, eds. *Psichiatria ed Ecologia*. Rome, Italy: CIC Edizioni Internazionali; 2001:64-65.
11. Kipman SD, Lopez H, Ruiz P, et al. Ecology and psychiatry: conjunction and diversity. Symposium S-12 in International Jubilee Congress From Clinical Practice to Research: Rethinking Psychiatry. Paris, France, June 26-30, 2000:37.
12. Krasnov V. Psychopathological consequences of the Chernobyl disaster as a subject of ecological psychiatry. *Ital J Psychiatry Behav Sci*. 2004;14:9-13.
13. McFarlane A. Managing the psychiatric morbidity of disasters. *World Psychiatry*. 2002;1:153-154.
14. Okasha A. Mental health in Africa: the role of the WPA. World Psychiatry. 2000;1:32-35.
15. Okasha T. Ecology and psychiatry in Africa: problems and perspectives. *Ital J Psychiatry Behav Sci.* 2004;14:14-19.
16. Paykel ES. The interview for recent life events. *Psychol Med*. 1997;27:301-310.
17. Pine DS, Cohen P, Johnson JG, Brook JS. Adolescent life events as predictors of adult depression. *J Affect Dis*. 2002;68:49-57.
18. Pozzi G, Frustaci A, Janiri L, De Risio S. Stressful life events and psychiatry: methodological issues, theoretical models and research perspectives. *Ital J Psychiatry Behav Sci*. 2004;14:29-34.
19. Sironi F. *Persecutori e vittime. Strategie di violenza*. Milan, Italy: Feltrinelli Editore; 2001.
20. Spinetti G, Kipman SD. Ecology, psychiatry and mental health: general perspectives and the work context. *Ital J Psychiatry Behav Sci*. 2004;14:5-8.
21. Taylor SE. Asymmetrical effects of positive and negative events: the mobilization-minimization hypothesis. *Psychol Bull.* 1991;1:67-85.
22. World Health Organization. Fact sheet No 260. 2001. April 2001. Available at: http://www.who.int.

Luigi Janiri, Istituto di Psichiatria, Policlinico Gemelli, Largo A. Gemelli, 8-00168 Rome, Italy
E-mail: janiri.lou@flashnet.it

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Advances in psychiatry, mass media, and mental health

Miguel-Angel Materazzi
Section on Mass Media and Mental Health, World Psychiatric Association

"Ahora o nunca. Mañana, es la mentira piadosa con que se engañan las voluntades moribundas"
(Now or never. Tomorrow is the self-compassionate lie with which the moribund will deceive itself)
José Ingenieros

During this 3-year period, the World Psychiatry Association (WPA) Section on Mass Media and Mental Health, which I have the honor of chairing, has approached the following questions:

- The Echelon network.
- The lack of an appropriate scientific dissemination in the media—or, which may be worse, a dissemination of distorted information thereof.
- A run-of-the-mill view as regards scientific concepts.
- Fostering swiftness as a synonym, so to speak, of knowledge. An indirect incitement to drugs.
- Violence in computer games, video games, magazines, movies, and television; graphic sensationalism in newspapers.
- Pornography within one's grasp—which deteriorates links.

If we take as an axis a research on narcisism (Freud, 1973), it could be understood that this characteristic of personality means that a person loves himself or herself, but this is not quite so: Narcissus loved his own image, and that was why he died: caught by his own image. This is a most primary feeling, related to omnipotence. Image, as it is disseminated by the mass media, is aimed at grasping consensus. About such a consensus, Hegel would say that it generates some kind of delirium, ie, presuming that we are able to achieve aims nobody is in a position to achieve, in other words, magical thinking.

It is Kleinmann's contention (1995) that our social experience gets transformed, and voyeurism, as a collective experience, converts sight in a really amoral point, insofar as it twists sensitivity directing it towards a point dealing with liking and consumption, wherein commitment and responsibility get cancelled. The huge

visual power of the media has a consequence: exerting influence on our experience bombarded by images that saturate our Ego. Such a dominance of image refers us to a fundamental, antithetic pair, namely exhibitionism–voyeurism. One element gives meaning to the other one. Within voyeurs' unconscious, trends similar to exhibitionists' can be found. Fixed to childhood experiences causing castration anxiety, voyeurs either try to deny those experiences through exhibitionism or replace those experiences through a clear projection onto other experiences as if it were a reinsurance against the traumatic fact they have suffered from. Thus, an exhibitionist becomes a voyeur. Says Fenichel (1966) "Owing to insatiability, the eagerness to looking out for-spying on is likely to reach a more and more sadistic meaning." Spying on is a replacement of a sadistic behavior: children say: "I didn't do it ... I just watched the other buddy who did it..." Voyeurs shift their interest for destroying, ie, castrating, toward an interest for looking, so that both responsibility and guilt feelings are avoided. An interesting point: one of the major tortures you can inflict on someone is forcing this person to witness terrible, horrific, appalling facts he or she will be unable to forget. TV news brings heartbreaking images; however, you have your remote control at hand should the news be too horrible for you to watch. Zapping has become a kind of cruel paradox coupled to a worrying human transformation: the virtuality of the media, the entertainments, and the procedures is most likely to cause us to think that war is a game and a game is war.

The media-induced globalization dodges the local restriction of values no sooner than globalization is apt at entering the intimacy of values. The media try their utmost to cause emotion, and emotion is made for clouding common sense, judgment of reality, and decoding. Emotion mobilizes; in the majority of cases emotions are channeled toward escape. Some doses of daydreaming and escapism compensate for frustration while numbing the critical ability (Materazzi, 2004).

- From our Section, we have done some research on the Echelon network, which includes five world intelligence services from Australia, Canada, England, New Zealand, and the USA, an organization created at the beginning of the Cold War. Thanks to the booming of the Internet, Echelon has been redesigned to search thousands and thousands of Web pages the world over; in a sense, Echelon is the back door to Windows and other computer systems. All this information not only allows services to control countries, but also to do lucrative business by spying on corporations—a check, by the way that has been publicly disseminated by the media the world over in 2004 on the basis of a report of a European Parliament Committee on Echelon—*and* the compatibility of Echelon with the laws in force in the European Union is in serious dispute because NGOs understand Echelon to be a violation of the fundamental right to privacy and the fundamental aspects of liberty and freedom as they are defined in the Section 8 of the

European Agreement. So, it is no wonder that Echelon is interesting to our Section. It is not only a super (secret) mass medium, but also it threatens human rights: if we are to protect democracy we have to defend the rights to privacy and freedom within the new communication technologies. Otherwise any action by any citizen will be scrutinized.

- The would-be scientific informants pullulating among the media—mainly TV, magazines, and newspapers—only deal with topics directly related to marketing: cosmetic surgery, anabolic steroids, nutrition, products aiming at achieving determined bodily esthetics, and the unmasked dissemination of chemicals with no supervising medical ethics whatsoever (Lipovetsky, 1994). On "normal" TV, ie, *not* on cablevision, only a few, sporadic, scientific programs, with a very low rating, are presented in earnest, and try to give the community an approach to scientific knowledge. Sometimes, however, many informants devoted to disseminate "scientific contributions" do not have even a minor scientific degree.

- Generally speaking, banalizing scientific knowledge, as well as banalizing destructive, violent news is a constant in the mass media. Those facts are aiming at making relative everything important, everything significant, to give more space to everything superfluous and banal. Our Section has been in a position to check such a trend during the last 3 years by means of surveys we conducted among 64 countries worldwide, which, incidentally, we have sent to the WPA, and can be read on the WPA on-line bulletin.

- Our Section has been in a position to ascertain the MO extant in a great majority of the media, ie, speed, at almost a vertiginous velocity, as if we were living within a videoclip, even fragmented speed. This means that some people in the public at large think they have been given knowledge, but they have only been given amalgamated, tendentious pseudoknowledge, directed ultimately to misleading information. As regards drugs—with a few exceptions—all TV, movie, and advertising-related proposals, with only a small masking façade, entice, stimulate, and lead to a greater substance use, thus marginalizing violence.

- The unidirectional communication is a feature of the mass media. Even though they disseminate information, they are deaf. We cannot either talk to them or interrupt them—they are enclosed within a narcissistic monologue. Video games, basically constructed upon the destruction of another being, reinforce the prevalence of "appearance." In other words, masking substitutes for contents. But, this is not a void way of substituting things. Quite on the contrary, masking magnifies the scatological contents with a hyperexhibition, and abundance of wild violence mixed with

hedonistic pleasure—a fine way to maximize perverse mechanisms. The mass media condition people to become citizens of two worlds: the mass media world and the real world. Having an experience in mass media means that the new (mass media) continent you have just entered is virtual, ie, you have an apparent experience, not a real one. Paradoxically, however, this new world demands that reality formulates its laws anew.

- Children, mainly due to their defenselessness, are treated as things, not to say treated as a merchandise apt at a degraded sexual use to be destroyed afterwards. A perverse pact is set up among the media that manage information and the consuming public; a pact that fosters and exploits both the regressive aspects and the primary drives. Topics that are presented on either screen or paper oscillate in a pendular way between sexuality and sadism. The overwhelming exhibition of violent scenes, murders, and pornshows exerts lots of influence upon society's ethical values; thus, a sector of the population becomes insensitive, indifferent to all and every manifestation of aggressiveness: videos of the war in Iraq, jails, and Guantánamo. The exacerbation of this pseudosexual liberation that not only abides by, but also destroys all, sexual inhibitions and prejudices actually leads people to an impairment of the affective predisposition to love. Instead, this media-caused stimulation is aiming at a coarse, lascivious, and rude sensuality—and all these paraphernalia lead to a blockade of affects, and an increase of the schizoid attitude. We are aware of how superficial as well as skilful is the link that type of personality maintains with regard to another being, a fact inducing to passivity: that is, spending—no, wasting—hours on end watching TV programs, a declared retraction from reality en route to a world of fantasy. It could be said that, by resorting to the mechanism of projection mass media, people demonstrate the new trend, ie, your fellow man is worse than ourselves. And, thanks to reintrojection they reinforce their unconscious fantasies. The idea is causing a strong emotion to people without, however, creating a feeling because any feeling involves commitment and an appraisal of situation likely to undermining those passive modes.

Federico Fellini (1977) considered TV to be an invention that was not only strange but also devilish: “It has been born with the intention of informing but, due to a mysterious motive, it just failed. Instead of disseminating culture it destroys everything, hurricane-like. It is as if war, religion, everything (the Almighty involved) were poured into a blender that will desintegrate all into tiny particles.” In other words, TV has become a referent for the cliché of the medley culture pertaining to late modernism that construes life as a fragmentary projection, as a zapping session programmed by an unbalanced psychotic.

By the way, did somebody speak of the sound and the fury?

We are a world of observers whose values have been fractionated. Within the crowd's anomia, a human being limits himself or herself and contemplates passively; his or her initiative has been delegated. Reality is a collage, axiological aspects are devoid of contents. Sociability when it becomes optative makes null and void the necessary relationships among people—aspects, at that, which shape and make up a person within a real, palpitating, human community. The person-within-the-virtual-reality is not subject to the constant demands of "material" people; however, those demands are likely to overwhelm him or her, on the one hand, but they are also likely to have him or her become conscious of how important are his or her action or omission (Materazzi, 2004).

Nowadays, there is a new scope to consider time, history, geography, and even the Dasein. In a way, information is getting transformed, or becomes the new currency of the global economy with the highest exchange rate in any country whose communication "industrialists" have understood that the Fourth Estate is one of the most lucrative business of late modernism. We could say that broadcasting delivers pseudo-information; telecasting shows things in a scotomization style; newspapers analyze subjectively, and the Internet that constitutes the instantaneity of the media is unfortunately controlled as we have seen above.

Let us get back for a moment to the Echelon problem. The British Association APC (Association for the Progress of Communication) founded in 1990 is, in Europe, the first NGO working for peace, development, and the environmental protection. It deals with the European rights on the Internet –thus, the APC considers that the specific right to privacy, freedom of expression and conscientization (not only on the Internet but also on any possible new information technologies likely to be created) have to be included in the EU Chart of Fundamental Rights.

The APC requests that a common protection level be established against the intelligence services, ie, committees for a specific control and responsible for the supervision and follow-up of such activities should be created.

The APC is to propose to the European Parliament the organization of a world congress of NGOs from Europe, the USA, and Latin America. Should this Congress be launched, our Section will request the FINTECO Foundation, a WPA Member Society I am honored to chair, to participate actively. It should be noted that, during 2004 (starting 2003), both our Section and the FINTECO Foundation had already started the dissemination of materials related to the Echelon network as implications thereof, so that the community be aware of this very serious problem.

Moreover, our Section is agreeable to the idea of the APC to create and foster the use of encryptation software, so that encryptation becomes a general norm.

In this connection, and related to the common activities of both our Section

and FINTECO, a video film was created, produced, and directed by myself. Title is "Los anhelantes" (*People who long for ...*). It deals with a female Professor who tries to make her students aware of what the Echelon network is. The EC of the University forces her to take this information out, inasmuch as it doesn't pertain to the syllabus, besides hindering and disturbing the institutions that finance that University. While she is alone at home, she imagines she is able to arrange a league of paradigmatic thinkers such as: Indira Gandhi, Alicia Moreau de Justo (the first Argentine lady doctor, early 20th century), Sister Juana Inés de la Cruz (a great Mexican poet, 17th century), and José Ingenieros (the first Argentine psychiatrist lecturing at the Paris Sorbonne, early 20th century), so that those thinkers would be in a position to debate with some representatives of the constituted powers that resort to an Echelon-like network. Those paradigmatic representatives are: General Patton (for the military), Ms Elizabeth Murdoch (for the big corporations), and Pope Pius XII (for certain aspects of the Roman Catholic Church). Up to now this video film has been run at several local and international Congresses of Psychiatry and Mental Health.

"La lucha perdida es la lucha abandonada"
(A lost fight was an abandoned fight)

In accordance with the thinking of Adorno (Materazzi, 1997), we suppose that, nowadays, the contents of the mass media are a kind of attack to all forms of thought. It could also be said, however, that a small mass media sector is nonetheless able and willing to generate possibilities for scientific and cultural dissemination, getting more acquainted with people and populations, exchanging ideas, and the telecasting of long sought education- and technology-based programs—a most welcome initiative apt at creating among the audience a greater willingness to be inserted within the real world.

During the last 3 years, in view of this hypercomplex standpoint—hypercomplex but maybe susceptible to modification—our Section on Mass Media and Mental Health has not ceased to expose publicly at the local and international scientific meetings surveys, reports, and consensus statements denouncing war, violence, and discrimination, a position in accordance with a very important axis favored by the WPA, that is destigmatization, Prof Roger Montenegro (Chair of the CONTENER Foundation) is in charge. Moreover, under the influence of the precious suggestions of both the President Elect of the WPA, Prof Juan E. Mezzich, and the Secretary for Sections, Prof George N. Christodoulou, we have organized, during these last 3 years many local and international Section Meetings, the core idea of which is setting up an inter-Section network apt at strengthening each Section and all Sections in general, towards a more scientific and humane ideology.

Synergy, in nature, is a strength that is to be found everywhere. I remember Sean Covey when he said that sequoias grow

together and share a wide system of intertwined roots. If sequoias did not enjoy such a system, any strong gale should suffice to tear them down. Well, that is the inter-section ideology that our Section proposes.

Bibliography

1. Association for the Progress of Communication (APC). Available at: http://www.apc.org.
2. Eco U. *La estrategia de la illusion*. Buenos Aires, Argentina: Lumen-De La Flor; 1986.
3. Fellini F. *Historia del cine*. Madrid, Spain: Danae; 1977.
4. Fenichel O. *Teoría Psicoanalítica de las Neurosis*. Buenos Aires, Argentina: Paidós; 1966.
5. Freud S. *Introduccion al narcisismo-recuerdo- repetición y elaboración, Obras completas*. Vol II, 3rd ed. Madrid, Spain: Biblioteca Nueva; 1973.
6. Freud S. *El malestar en la cultura, Obras completas*. Vol XXI, Buenos Aires, Argentina: Amorrortu; 1979.
7. Kleinmann A. Pitch, picture, power. The globalization of local suffering and the transformation of social experience. *Ethnos*. 1995;60:181-191.
8. Lipovetzki G. *La era del vacío: Ensayos sobre individualismo contemporáneo*. Barcelona, Spain: Anagrama; 1994.
9. Materazzi MA, Franconi MC. *Mass Media y Salud Mental*. Buenos Aires, Argentina: Salerno; 1997.
10. Materazzi MA et al. *Salud Mental: enfoque transdisciplinario*. 3ed, Buenos Aires, Argentina: Salerno-Proa; 2004:XXI.

Translation: Françoise M. S. de Pérez Fernández

Miguel-Angel Materazzi, Professor of Psychiatry, University of Buenos Aires School of Medicine, Avda Cuel Diaz 1775, PB, Buenos Aires 1425, Argentina. Consulting Professor, School of Medicine, University of Buenos Aires; Chair of the Foundation for Interdisciplinary Investigation on Communication (FINTECO), a Member Society of the WPA, and Chair of the WPA Section on Mass Media and Mental Health.
E-mail: materazzi@arnet.com.ar, fran@netex.com.ar

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